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Western Mining in the Twentieth Century Series

Paul Schipke

MINING AND ENVIRONMENTAL ENGINEER FOR UTAH-BHP COMPANY, 1972-1997

Interviews Conducted by
Eleanor Swent
in 2003

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Kutai Coal Exploration Project, Kalmantan, Indonesia, December 1996 *Photo courtesy Julie Schipke*
L to R: Paul Schipke, John Hannah, Dave Witherspoon
(High grade coal outcrop in the background)

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PREFACE

The oral history series on Western Mining in the Twentieth Century documents the lives of leaders in mining, metallurgy, geology, education in the earth and materials sciences, mining law, and the pertinent government bodies. The field includes metal, non-metal, and industrial minerals. In its eighteenth year the series numbers sixty-five volumes completed and others in process.

Mining has changed greatly in this century: in the technology and technical education; in the organization of corporations; in the perception of the national strategic importance of minerals; in the labor movement; and in consideration of health and environmental effects of mining.

The idea of an oral history series to document these developments in twentieth century mining had been on the drawing board of the Regional Oral History Office for more than twenty years. The project finally got underway on January 25, 1986, when Mrs. Willa Baum, Mr. and Mrs. Philip Bradley, Professor and Mrs. Douglas Fuerstenau, Mr. and Mrs. Clifford Heimbucher, Mrs. Donald McLaughlin, and Mr. and Mrs. Langan Swent met at the Swent home to plan the project, and Professor Fuerstenau agreed to serve as Principal Investigator.

An advisory committee was selected which included representatives from the materials science and mineral engineering faculty and a professor of history of science at the University of California at Berkeley; a professor emeritus of history from the California Institute of Technology; and executives of mining companies. Langan Swent delighted in referring to himself as "technical advisor" to the series. He abetted the project from the beginning, directly with his wise counsel and store of information, and indirectly by his patience as the oral histories took more and more of his wife's time and attention. He completed the review of his own oral history transcript when he was in the hospital just before his death in 1992. As some of the original advisors have died, others have been added to help in selecting interviewees, suggesting research topics, and securing funds.

The project was presented to the San Francisco section of the American Institute of Mining, Metallurgical, and Petroleum Engineers (AIME) on "Old-timers Night," March 10, 1986, when Philip Read Bradley, Jr., was the speaker. This section and the Southern California section of AIME provided initial funding and organizational sponsorship.

The Northern and Southern California sections of the Woman's Auxiliary to the AIME (WAAIME), the California Mining Association, and the Mining and Metallurgical Society of America (MMSA) were early supporters. Later the National Mining Association became a sponsor. The project was significantly advanced by a generous bequest received in November 1997 upon the death of J. Ward Downey, UC Berkeley alumnus and early member of the mining series advisory committee. His own oral history was completed in 1992. Other individual and corporate donors are listed in the volumes. Sponsors to date include nineteen corporations, four foundations, and 113 individuals. The project is ongoing, and funds continue to be sought.

The first five interviewees were all born in 1904 or earlier. Horace Albright, mining lawyer and president of United States Potash Company, was ninety-six years old when interviewed. Although brief, this interview adds another dimension to a man known primarily as a conservationist.

James Boyd was director of the industry division of the military government of Germany after World War II, director of the U.S. Bureau of Mines, dean of the Colorado School of Mines, vice president of Kennecott Copper Corporation, president of Copper Range, and executive director of the National Commission on Materials Policy. He had reviewed the transcript of his lengthy oral history just before his

death in November, 1987. In 1990, he was inducted into the National Mining Hall of Fame, Leadville, Colorado.

Philip Bradley, Jr., mining engineer, was a member of the California Mining Board for thirty-two years, most of them as chairman. He also founded the parent organization of the California Mining Association, as well as the Western Governors Mining Advisory Council. His uncle, Frederick Worthen Bradley, who figures in the oral history, was in the first group inducted into the National Mining Hall of Fame in l988.

Frank McQuiston, metallurgist for the Raw Materials Division of the Atomic Energy Commission and vice president of Newmont Mining Corporation, died before his oral history was complete; thirteen hours of taped interviews with him were supplemented by three hours with his friend and associate, Robert Shoemaker.

Gordon Oakeshott, geologist, was president of the National Association of Geology Teachers and chief of the California Division of Mines and Geology.

These oral histories establish the framework for the series; subsequent oral histories amplify the basic themes. After over thirty individual biographical oral histories were completed, a community oral history was undertaken, documenting the development of the McLaughlin gold mine in the Napa, Yolo, and Lake Counties of California (the historic Knoxville mercury mining district), and the resulting changes in the surrounding communities. This comprises twelve volumes, including eight Knoxville District McLaughlin Mine volumes with several interviews each. The remaining four volumes contain the interviews of William Humphrey, Hugh Ingle, Patrick Purtell, and James Wilder.

Future researchers will turn to these oral histories to learn how decisions were made which led to changes in mining engineering education, corporate structures, and technology, as well as public policy regarding minerals. In addition, the interviews stimulate the deposit, by interviewees and others, of a number of documents, photographs, memoirs, and other materials related to twentieth century mining in the West. This collection is being added to The Bancroft Library's extensive holdings. A list of completed and in process interviews for the mining series appears at the end of this volume.

Interviews were conducted by Malca Chall, Fredric L. Quivik and Eleanor Swent.

Eleanor Swent, Project Director
Western Mining in the Twentieth Century Series

January 2003
Regional Oral History Office
University of California, Berkeley

Western Mining in the Twentieth Century Oral History Series

Interviews Completed, July 2004

Horace Albright, *Mining Lawyer and Executive, U.S. Potash Company, U.S. Borax, 1933-1962*, 1989

Frank F. Aplan, *Mineral Education Generalist, Professor of Metallurgy and Mineral Processing, 1951-1998*, 2003

Samuel S. Arentz, Jr., *Mining Engineer, Consultant, and Entrepreneur in Nevada and Utah, 1934-1992*, 1993

James Boyd, *Minerals and Critical Materials Management: Military and Government Administrator and Mining Executive, 1941-1987*, 1988

Philip Read Bradley, Jr., *A Mining Engineer in Alaska, Canada, the Western United States, Latin America, and Southeast Asia*, 1988

Catherine C. Campbell, *Ian and Catherine Campbell, Geologists: Teaching, Government Service, Editing*, 1989

William Clark, *Reporting on California's Gold Mines for the State Division of Mines and Geology, 1951-1979*, 1993

John Robert Clarkson, *Building the Clarkson Company, Making Reagent Feeders and Valves for the Mineral Industry, 1935 to 1998*, 1999

Norman Cleaveland, *Dredge Mining for Gold, Malaysian Tin, Diamonds, 1921-1966; Exposing the 1883 Murder of William Raymond Morley*, 1995

William E. Colby, *Reminiscences* (California mining lawyer), 1954

Harry M. Conger, *Mining Career with ASARCO, Kaiser Steel, Consolidation Coal, Homestake, 1955 to 1995: Junior Engineer to Chairman of the Board,* 2001

James T. Curry, Sr., *Metallurgist for Empire Star Mine and Newmont Exploration, 1932-1955; Plant Manager for Calaveras Cement Company, 1956-1975*, 1990

Donald Dickey, *The Oriental Mine, 1938-1991*, 1996

J. Ward Downey, *Mining and Construction Engineer, Industrial Management Consultant, 1936 to the 1990s*, 1992

Warren Fenzi, *Junior Engineer to President, Director of Phelps Dodge, 1937 to 1984*, 1996

Hedley S. "Pete" Fowler, *Mining Engineer in the Americas, India, and Africa, 1933-1983*, 1992

James Mack Gerstley, *Executive, U.S. Borax & Chemical Corporation; Trustee, Pomona College; Civic Leader, San Francisco Asian Art Museum*, 1991

Robert M. Haldeman, *Managing Copper Mines in Chile: Braden, CODELCO, Minerec, Pudahuel; Developing Controlled Bacterial Leaching of Copper from Sulfide Ores; 1941-1993*, 1995

Guy Harris, *A Career in Mining Chemicals*, 2003

John F. Havard, *Mining Engineer and Executive, 1935-1981*, 1992

Wayne Hazen, *Plutonium Technology Applied to Mineral Processing; Solvent Extraction; Building Hazen Research; 1940-1993*, 1995

George Heikes, *Mining Geologist on Four Continents, 1924-1974*, 1992

Helen R. Henshaw, *Recollections of Life with Paul Henshaw: Latin America, Homestake Mining Company*, 1988

Homestake Mine Workers, Lead, South Dakota, 1929-1993, interviews with Clarence Kravig, Wayne Harford, and Kenneth Kinghorn, 1995

Lewis L. Huelsdonk, *Manager of Gold and Chrome Mines, Spokesman for Gold Mining, 1935-1974*, 1988

William Humphrey, *Mining Operations and Engineering Executive for Anaconda, Newmont, Homestake, 1950 to 1995*, 1996

Hugh C. Ingle, Jr., *Independent Small Mines Operator, 1948 to 1999; Corona Mine*, 2000

James Jensen, *Chemical and Metallurgical Process Engineer: Making Deuterium, Extracting Salines and Base and Heavy Metals, 1938-1990s*, 1993

Arthur I. Johnson, *Mining and Metallurgical Engineer in the Black Hills: Pegmatites and Rare Minerals, 1922 to the 1990s*, 1990

G. Frank Joklik, *Exploration Geologist, Developer of Mt. Newman, President and CEO of Kennecott, 1949-1996; Chairman, Salt Lake 2002 Olympic Winter Games Committee*, 1997

Evan Just, *Geologist: Engineering and Mining Journal, Marshall Plan, Cyprus Mines Corporation, and Stanford University, 1922-1980*, 1989

Robert Kendall, *Mining Borax, Shaft-Freezing in Potash Mines, U.S. Borax, Inc., 1954-1988*, 1994

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume I, 1998

Anderson, James, "Homestake Vice President-Exploration"
Baker, Will, "Citizen Activist, Yolo County"
Birdsey, Norman, "Metallurgical Technician, McLaughlin Process Plant"
Bledsoe, Brice, "Director, Solano Irrigation District"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume II, 1998

Cerar, Anthony, "Mercury Miner, 1935-1995"
Ceteras, John, "Organic Farmer, Yolo County"

Conger, Harry, "President, Chairman, and CEO, Homestake Mining Company, 1977 to 1994"
Corley, John Jay, "Chairman, Napa County Planning Commission, 1981 to 1985"
Cornelison, William, "Superintendent of Schools, Lake County" (Includes an interview with John A. Drummond, Lake County Schools Attorney)

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume III, 1998

Crouch, David, "Homestake Corporate Manager-Environmental Affairs"
Enderlin, Elmer, "Miner in Fifty-Eight Mines"
Fuller, Claire, "Fuller's Superette Market, Lower Lake"
Goldstein, Dennis, "Homestake Corporate Lawyer"
Guinivere, Rex, "Homestake Vice President-Engineering"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume IV, 1998

Gustafson, Donald, "Homestake Exploration Geologist, 1975-1990"
Hanchett, Bonny Jean, "Owner and Editor, Clearlake *Observer*, 1955-1986"
Hickey, James, "Director of Conservation, Development, and Planning for Napa County, 1970 to 1990"
Jago, Irene, "The Jagos of Jago Bay, Clear Lake"
Jonas, James, "Lake County Fuel Distributor"
Koontz, Dolora, "Environmental Engineer, McLaughlin Mine, 1988-1995"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume V, 1998

Kritikos, William, "Operator, Oat Hill Mine"
Landman, John, "Rancher, Morgan Valley"
Lyons, Roberta, "Journalist and Environmentalist"
Madsen, Roger, "Homestake Mechanical Engineer"
Magoon, Beverly, "Merchant and Craft Instructor, Lower Lake"
McGinnis, Edward, "Worker at the Reed Mine"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume VI, 1999

Robert McKenzie, "McKenzies in Monticello, Berryessa Valley"
Harold Moskowite, "Napa County Supervisor"
Marion Onstad, "Neighbor and Employee of the McLaughlin Mine, 1980-1995"
Ronald Parker, "Resident Manager of the McLaughlin Mine, 1988-1994"
Richard Stoehr, "Homestake Engineer and Geologist to Senior Vice-President and Director"
Joseph Strapko, "Exploration Geologist, McLaughlin Mine Discovery, 1978"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume VII, 2000

Jack Thompson, "General Manager, McLaughlin Mine, 1981-1988"
Twyla Thompson, "County Supervisor, Yolo County, 1975-1985"
Avery Tindell, "Capay Valley Environmentalist"
John Turney, "McLaughlin Metallurgist: Pioneering Autoclaving for Gold"
Della Underwood, "Knoxville Rancher, McLaughlin Mine Surveyor"
Walter Wilcox, "County Supervisor, Lake County, 1979-1995"
Peter Scribner, "Boyhood at the Knoxville Mine, 1941-1944"

The Knoxville Mining District, The McLaughlin Gold Mine, Northern California, Volume VIII, 2002

Dean Enderlin, "Mine Geologist, Reclamation Manager, McLaughlin Mine"
Susan Harrison, "McLaughlin Natural Reserve"
Raymond Krauss, "Environmental Manager, McLaughlin Mine"

Marian Lane, *Mine Doctor's Wife in Mexico During the 1920s*, 1996

John Sealy Livermore, *Prospector, Geologist, Public Resource Advocate: Carlin Mine Discovery, 1961; Nevada Gold Rush, 1970s*, 2000

J. David Lowell, *Using Applied Geology to Discover Large Copper and Gold Mines in Arizona, Chile, and Peru*, 1999

Plato Malozemoff, *A Life in Mining: Siberia to Chairman of Newmont Mining Corporation, 1909-1985*, 1990

Donald H. McLaughlin, *Careers in Mining Geology and Management, University Governance and Teaching*, 1975

James and Malcolm McPherson, *Brothers in Mining*, 1992

Frank Woods McQuiston, Jr., *Metallurgist for Newmont Mining Corporation and U.S. Atomic Energy Commission, 1934-1982*, 1989

Gordon B. Oakeshott, *The California Division of Mines and Geology, 1948-1974*, 1988

James H. Orr, *An Entrepreneur in Mining in North and South America, 1930s to 1990s*, 1995

Vincent D. Perry, *A Half Century as Mining and Exploration Geologist with the Anaconda Company*, 1991

Patrick Purtell, *Maintenance and Management at the McLaughlin Mine, 1985 to 1997*, 1999

Carl Randolph, *Research Manager to President, U.S. Borax & Chemical Corporation, 1957-1986*, 1992

John Reed, *Pioneer in Applied Rock Mechanics, Braden Mine, Chile, 1944-1950; St. Joseph Lead Company, 1955-1960; Colorado School of Mines, 1960-1972*, 1993

Joseph Rosenblatt, *EIMCO, Pioneer in Underground Mining Machinery and Process Equipment, 1926-1963*, 1992

Paul Schipke, *Mining and Environmental Engineer for Utah-BHP Company, 1972-1997*, 2004

Robert Shoemaker, *Metallurgical Engineer: Union Carbide, Bechtel, San Francisco Mining Associates; Metallurgical Consultant, 1953 to 2000,* 2001

Eugene David Smith, *Working on the Twenty-Mule Team: Laborer to Vice President, U.S. Borax & Chemical Corporation, 1941-1989*, 1993

Simon Strauss, *Market Analyst for Non-ferrous Metals and Non-metallic Minerals, Journalist, Mining Corporation Executive, 1927-1994*, 1995

Langan W. Swent, *Working for Safety and Health in Underground Mines: San Luis and Homestake Mining Companies, 1946-1988*, 1995

James V. Thompson, *Mining and Metallurgical Engineer: the Philippine Islands; Dorr, Humphreys, Kaiser Engineers Companies; 1940-1990s*, 1992

William Wilder, *Owner of One Shot Mining Company: Manhattan Mercury Mine, 1965-1981*, 1996

Alexander M. Wilson, *Leading a Changing Utah Construction and Mining Company: Utah International, GE-Utah, BHP-Utah, 1954 to 1987*, 2000

Interviews in Process

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INTERVIEW HISTORY--Paul Schipke

The Paul Schipke oral history fills in an important part of the story of Western Mining in the Twentieth Century, and is the sixty-fifth in the oral history series of that name. The biggest challenge to mining in this period was the popular environmental movement which began in the last half of the century, resulting in the Environmental Protection Act of 1970. Schipke was hired by the Utah Construction and Mining Company to be its first project manager to implement this legislation at its Arizona and New Mexico mines. His career thus encompasses the entire period of the impact which this legislation had on the industry, and he saw it in the United States, South America, Australia, and Indonesia. He is an especially sensitive and articulate observer, and we are fortunate to include his recollections in the series. Other narrators in the series, especially Langan Swent, David Crouch, and Raymond Krauss of Homestake Mining Company and Eugene Smith of U.S. Borax, spoke at length of their environmental work, and most of the volumes contain references to this issue, but Schipke is the only mining engineer whose entire career had this focus.

The Utah Company, which has undergone a number of name changes and is now BHP-Billiton, was the first major Western mining company to take the environmental movement seriously, and to establish a strong environmental division, which came to be the training ground for a number of environmental engineers. Alexander [Bud] Wilson, the head of Utah, was interviewed for this series, but the environmental division was only one of his many concerns. Leroy Balzer, Utah's first environmental director, was much interested in the oral history series, but he moved to Australia and was unavailable for interviewing. I happened to be going to Lead, South Dakota, in 2003 for personal reasons when I learned that Paul Schipke had retired from Utah and was living in Two-Bit Gulch near Deadwood. After a brief correspondence we arranged to meet and interviews were conducted in May and September, 2003.

Paul's house was built in the forest, in the area swept by the Grizzly Gulch fire of 2002. He had, however, built with this risk in mind, and the house stands unscathed. He explains that he resisted the temptation to build a wooden deck or to store his firewood conveniently near the house. He used fireproof shingles, laid a concrete apron all around the foundation, and cleared the brush and vegetation away from the house. The living room is sensationally beautiful, with one wall of glass and another of stone. Textiles from New Mexico, Arizona, and Indonesia, and artifacts from all his travels, make it a veritable museum. While we interviewed in May, soft fluffy snowflakes began to fall outside, and the fire from the fireplace was more than just decorative. The September interview was held in the Golden Hills Inn in Lead.

Paul Schipke's life has held abundant political and social challenges as well as the usual risks of mining and living in isolated foreign locations. He has obviously enjoyed it all, and can now consider those difficulties with some detachment. His interview is valuable for its discussion of working for environmental protection, and also dealing with workers of different cultures. Since our time was limited, we gave short shrift to his coal mining experience.

We are indebted to Mark Stromberg for facilitating this important interview. The interview recordings were transcribed, lightly edited, and sent to Mr. Schipke for review. He returned the transcript promptly and with minimal corrections, preserving the conversational nature of the interviews.

According to Mr. Schipke's wishes, three brief sections of this interview have been sealed because they contain technical information which could be considered proprietary. The sealed sections have been deposited along with the tapes and transcript in The Bancroft Library, and will be made available in the year 2025.

The Regional Oral History Office was established in 1954 to augment through tape-recorded interviews the Library's materials on the history of California and the West. Copies of all interviews are available for research use in The Bancroft Library and in the UCLA Department of Special Collections. The office is under the direction of Richard Cándida Smith, and the administrative direction of Charles B. Faulhaber, the James D. Hart Director of The Bancroft Library, at the University of California, Berkeley.

Eleanor Swent
Interviewer/Editor

November 2003
Regional Oral History Office
The Bancroft Library
University of California, Berkeley

Regional Oral History Office
The Bancroft Library

University of California
Berkeley, California 94720

BIOGRAPHICAL INFORMATION

(Please write clearly. Use black ink.)

Your full name Paul Harold Schipke

Date of birth 10 - 14 - 48 Birthplace Rapid City, SD

Father's full name William Frederick Schipke

Occupation Farmer Birthplace Belle Fourche, SD

Mother's full name Mildred Evelyn (Foster) Schipke

Occupation Nurse (R.N.) Birthplace ~~Mt.~~ Fallon, Montana

Your spouse/partner Julie Ann (Williams) Schipke

Occupation Market Research Birthplace Oakland, CA

Your children Brian C., Christopher P., Stephanie R., Alexander J., Paulina M.

Where did you grow up? rural South Dakota

Present community near Deadwood, SD.

Education High School Degree - Sturgis, SD

B.S. - South Dakota State University Brookings, SD • Chemistry / Zoology

M.S. - S.D. School of Mines & Technology, Rapid City, SD • Mine Engineering

Occupation(s) Mining Engineer to various managerial positions

Areas of expertise Surface mining ; reclamation

International business

Other interests or activities Investments, hunting, scuba diving

Organizations in which you are active American Tree Farm System -

SIGNATURE Paul H Schipke DATE 3/15/04

INTERVIEW WITH PAUL SCHIPKE

[Interview I: May 8, 2003] [Minidisc I]

00:00:32

Swent: This is May 8, 2003 and we're in--this is technically Deadwood, South Dakota?

00:00:44

Schipke: We're in Two-Bit Gulch which is three miles from Deadwood.

00:00:48

Swent: Okay, I'm interviewing Paul Schipke, who's had a very interesting career. Much of it had been in coal, but we're not going to talk much about coal today, to his disappointment. Maybe we can do it later, but since I don't know much about coal, we're going to talk about some of the other parts of his career. Let's start with a little bit about the basics of where you were born and educated and so on; the early part of your life.

00:01:25

Schipke: Well, I was basically born in the northwest part of South Dakota, out on the prairie near Newell, South Dakota. And I grew up on a farm, and I vowed that I never wanted to see a farm again. So when we moved from Whitewood, I graduated from high school in Sturgis, South Dakota. Basically because I received a couple scholarships, I went to South Dakota State University in Brookings, South Dakota. I obtained a degree in zoology and chemistry, and when I completed my degree, I had to think about getting a job. The job prospects weren't exactly what I was hoping to do.

00:02:15

Swent: When was this, Paul?

00:02:18

Schipke: This would have been about 1970. I graduated, didn't like the job prospects. About that time, I was a recipient of an A.E.C. [Atomic Energy Commission] scholarship from the government which allowed me to go to, I don't know, about twenty of the universities, big name universities, in the States. One of the requirements before I could accept that scholarship was I had to go back and get a math degree. So I went back to the South Dakota School of Mines, and while I was there I talked about getting a degree in mining engineering, which is what I always wanted to do. So when I was there I walked away from the free-ride scholarship from the government, and started over and got a degree in mining engineering.

00:03:14

Swent: You said your father had been in Alaska. Was he a mining--?

00:03:19

Schipke: No, my father basically grew up on a farm, he grew up on a homestead north of Newell. His grandfather was a prospector, and he spent most of his life prospecting for placer gold, primarily. He was in Deadwood before the fire in Deadwood, so back in the 1870s, and then he did have claims out on Custer Peak, but he felt that he couldn't make any money out of it, because all the ore had to be brought out by the mule train. The milling costs were too high, and the transportation costs, for the grade of ore. So he walked away from it. About at that time you had the gold rushes to Alaska and Canada,

and he ended up emigrating to Canada and worked around Atlin, British Columbia. He basically worked there until he died, and he lived to something like ninety-four years old. My father, when he was up in his twenties, went up and spent a couple of winters working his placer mines in there in Atlin, British Columbia. And what you basically did is: during the winter months, when everything was froze, you mined the gravels down to bedrock. You stacked the gravels along the streambeds. In the spring, when you had your spring melt, you then processed the gravels through the sluice boxes and recovered your gold nuggets and gold dust. That's basically how my great-grandfather lived. My father had one year of that, and that was enough for him. [chuckles] That's the only mining history in the family, but I was always fascinated by it, the geology.

00:05:16
Swent: Was the same person homesteading that was prospecting?

00:05:19
Schipke: He grew up on the homestead. Basically he lived out on the homestead until he was high school age. After high school he worked in the farming community around Newell, South Dakota. He traveled a lot, doing construction work all over western United States. He had a really itchy foot, never married until he was fifty or forty-five. One winter, spring, and summer, he went up to Atlin, British Columbia, with his grandfather and worked the gold claims up there. That's the only real history in the family of mining.

00:06:01
Swent: You come from a long line of interesting people. Miners and people that didn't shy away from adventure, obviously.

00:06:13
Schipke: No.

00:06:15
Swent: Or hard work, either one.

00:06:16
Schipke: Might have been something that inspired me, because my father was always reading adventure stories and he claimed that he'd been to every state in the union except Hawaii and, I think it was, Maine. One state in the New England area that he missed. But he visited every state and worked in many of them, construction work. He just had an itch to see new places and learn how to do new things. I think I had a little of that in my blood.

00:06:44
Swent: [chuckles] So then when you got your mining and engineering degree you said you worked for Homestake.

00:06:53
Schipke: Well, I worked for Homestake on their swing shift, which was basically from like six until two in the morning. Then I'd get about four hours of sleep and then I'd go to the School of Mines [and Technology] and go to school for the day. So I worked three days during the week, and usually I worked on Saturday for Homestake. I had to learn how to get by on not a lot of sleep. It was a tough way to get my mining engineering degree, but that's what I wanted.

00:07:28
Swent: What was your job then?

00:07:29
Schipke: Basically labor, and I was able to fill in as contract miner when people were absent. It was all underground mining work, in various stopes, both cut-and-fill and also--they still had a few timber stopes in those days, and that's what I preferred to work in, because there was more money in the timber stopes. Harder work, but more money.

00:07:53
Swent: How much were you paid?

00:07:55
Schipke: Basically, the real money was on the contract, and there was a gold bonus. The base wage, I'm going to say--I can't remember exactly--I'm going to say we were down around two bucks, maybe three dollars an hour base wages. Your bonus was worth another couple of dollars, and if you had a good stope you'd triple that on the contract that you would get because you would get paid so much per ton of rock that was taken out of stope, less your explosives and consumables. The real money was in the contract, and I was only able to do that, since I was part-time, on a fill-in basis. When a miner was absent I could fill in and work with another miner on that contract, and then I would get a share for the payout when the survey was done.

00:08:50
Swent: What about safety?

00:08:52
Schipke: [sighs deeply] Well, on safety's side I never really had a serious accident. Early on in the game I had a very experienced foreman pull me aside, and he gave me advice that I carried with me through my entire career. He told me, "Paul, don't forget where you are, and remember that everything down in this mine is harder than your body. You have rock, you have steel, you have explosives, you have large pieces of wood. All of those things are harder than you are, so when push comes to shove, it's your body that's going to get broken." I never forgot that advice, and I never had an accident although I did have to work on a couple fatalities during that time at Homestake.

00:09:44
Swent: Who was this foreman?

00:09:47
Schipke: I can't remember his name, but he was a very humane man. He knew I was going to school, and you were not allowed to sleep underground. I was pulling chutes one time and leaning up against the wall of the drift propped up with a shovel; I fell asleep because I was so tired going to school and working. He came along and woke me up and never said a word to anybody about it. He just reminded me that it was very unsafe for something like that to happen, and went on about his way. He was a very understanding person, and I always remembered that foreman, but I can't remember his name to this day. But he had worked thirty years himself underground without an accident. He was well respected by the men and by management.

00:10:48
Swent: Did you have formal safety orientation or training?

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Schipke: Yes. Actually, we probably had--well, I should back up. We were required to read a book of about thirty pages, and we had to understand all of the rules of safety with respect to working underground. At the end of the first thirty days of employment, we were required to sign a piece of paper saying that we understood everything in the book, and we had asked our foreman to explain anything that was not clear. Formal classes, that did not occur.

00:11:26

Swent: Do you think most people really read the book?

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Schipke: I would say that some things you had to read just to be able to function underground, like the bell system to indicate what level you're on, how to call for an emergency, how to call for a skip or whatever, how to use a phone system. So there were some things you had to read, but I would say that probably half the book was never read by the employees. Anybody you worked with definitely put their arm around you and looked after you underground. Spent a lot of time--might have been a lot of practical jokes played on you, but they looked after your safety as much as they could. A lot of your training came from the other miners. The formal training I saw later in my career--the classroom training, the medical training, emergency training--none of this occurred, none of this occurred in those days. Safety glasses was about the only safety device we were required to wear, and, of course, hard hats.

00:12:38

Swent: Boots?

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Schipke: And the safety-toe boots. That was basically the safety gear that we wore. Later on a tremendous amount of safety gear was required, but at that time glasses, hard hats, steel-toed boots, that'd be it. A lot of people worked underground, because of the temperatures, in just bib overhauls, no T-shirt, no gloves, bare arms. Quite different than what I saw later in my career. It was a good experience. I enjoyed working for Homestake. I learned a lot about it, even though in my career I never worked underground again. It was the only time I worked underground, but I enjoyed working underground. I felt very safe underground, safe from the standpoint of: the closed-in feeling to me was almost a feeling of security, not threatening. [tape interruption]

00:14:56

Swent: Okay, now I think we're back in business. We had a little pause here. I think everything looks good. I think we're all right, I trust we are. So we'll move on then. You were working as a student, and obviously you were working very hard, and then you got your degree and started out job hunting. How did you get that first--?

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Schipke: That first job? Well, a typical engineer, I did a very methodical approach: I got a Standard & Poor's index, looked up the mining companies, and I wrote forty-eight letters to mining companies in the United States.

00:16:01

Swent: Oh, my.

00:16:02
Schipke: That were listed under the mining, as a mining company that was still functioning.

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Swent: This was in '77, right?

00:16:14
Schipke: No, this would have been'72. Seventy-two, 1972.

00:16:18
Swent: Yes.

00:16:21
Schipke: I can't remember how many responses I received, but I'm going to say that it was somewhere between four and five. Out of those, I went on three interviews that I remember. One I went to a coal company, Consolidation Coal Company, back in Illinois. Oh, I also went to U.S. Steel coal operation underground back in Harlan County, Kentucky, which was a real eye-opener to me.

00:16:55
Swent: What was it like?

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Schipke: Well, it was a mining community that had been in existence for like sixty or eighty years, very closed-in community, a very inbred group of people and activities. Very suspicious of outsiders. It was like stepping back in time thirty years or more. Definitely I wasn't very interested. When I stayed there I stayed in the hospital, there was no hotel in town, and I remember that I could buy moonshine in the drug store in mayonnaise jars.

00:17:30
Swent: Oh, my!

00:17:31
Schipke: [chuckles] So it was a very interesting place, but I wasn't quite ready for that after my struggle through college. I also interviewed and looked at an underground trona mine for, was it FMC Corporation, over in Wyoming, and I interviewed in general with Utah Construction and Mining Company, later known as Utah International. Of them all, I was very interested in Utah, but everybody else made me offers, but Utah never came back to me. I finally called them up and said, "I want to go to work for you because I got to make a decision in two days. What do you have?" They got back to me that afternoon and said, "We'll offer you a job in San Francisco working for our environmental department." They were very interested at that time because of my undergraduate work in zoology and chemistry, and that's when the pressure was really starting to mount against the mining companies on reclamation and the environmental damages that were occurred. Because it was the company I wanted, I accepted it and went to work in San Francisco in a corporate office.

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Swent: Who was it who called you back?

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Schipke: Wayne Peterson was the personnel manager in San Francisco who called me back. I went to work for J. Leroy Balzer, Dr. J. Leroy Balzer that had just headed up the environmental group for Utah. He reported directly to the CEO at that time, Bud Wilson. They were interesting times, because nobody knew, ourselves included, what we were supposed to be doing for the company. Everybody knew that there were problems out there that were starting to bear on mining, not just environmental issues, but also long-term industrial hygiene issues, exposure to employees. That was a real concern to our uranium operations in Wyoming. But how we were to function, what we were supposed to do, what the mines were supposed to do, this was all an unknown. It was basically whatever we felt should've been done. It led to a lot of confrontation at the mine level, a lot of uncertainty, a lot of confusion.

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Swent: How was this made evident to you?

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Schipke: Open hostility many times in visiting the mine; people refused to accept that there were any problems at the mine sites.

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Swent: Which mine sites are you talking about?

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Schipke: At that time I spent a lot of the time in the Wyoming uranium mines.

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Swent: And that was where?

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Schipke: Shirley Basin and the Lucky MC uranium mines in Wyoming out of Riverton and down near Casper, Wyoming.

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Swent: It was booming at that time, I guess.

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Schipke: It was booming at that time. So there was a tremendous amount of people that didn't recognize there were problems. Even if there were problems, they weren't willing to tackle fixing those problems, because of the cost usually.

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Swent: What sort of problems are you talking about?

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Schipke: Well, discharges of water from the mine sites that contain radioactive isotopes. Some of the work procedures, primarily in the maintenance departments, where people were exposed to high levels of radiation. They were just starting to wear badges, dosimeter badges, to determine how much that exposure was. Nobody had taken the next step, "Okay, so these people were at high levels of exposure, what do we do different, or what can we do to safeguard them in these procedures?" All of these were costly and required change, and people always resist change. There was open hostility at a lot of the mines,

and Leroy Balzer, who was the head of the group, he was just inundated with problems, hundreds of problems. We just didn't know where to start; as soon as we'd start one project, something else would heat up that we would have to jump on, so nothing was ever completely finished. It was difficult times in that department.

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Swent: Were the workers objecting to wearing the badges?

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Schipke: No, it was more the management, probably mid-management. I think really in hindsight that it was more that they didn't comprehend the magnitude of the problems, and they didn't want to take the time, energy, and money to address how to fix those problems. So that's where a lot of the roadblock came from.

00:23:08
Swent: What were the ways they could have fixed the problems?

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Schipke: Some of the problems were very expensive, like the mine dewatering problems required building settling ponds that cost millions of dollars. Then you had to treat all this water. These uranium mines had a lot of water, several thousand gallons a minute. We're talking significant impact, some of them were. All of this was on a backdrop of the government hadn't finalized the regulations, there was just a lot of proposed standards, so they were still being debated, and argued over. So the levels that we're shooting for may or may not become a requirement of law. It was also a factor of confusion at that time, too. After about a year of this, I grabbed the first opportunity I could to go to work at the mine and get back into what I considered real engineering. That was at the Navajo Mine. Although I went to work at the mine, I still ended up doing more onsite reclamation activities, all these environmental concerns.

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Swent: Was there radiation also there?

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Schipke: There was no radiation problem. Their biggest problem was that twenty years where they had mined the coal, and they never had bothered to regrade the surface at all, nothing at all was ever regraded.

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Swent: So this was reclamation?

00:24:44
Schipke: Reclamation, it was pure reclamation. There were drainages that were never re-established, and they were ponding water which contained a lot of salts and some metals in it that were unhealthy. And all these things had to be fixed, but it was primarily reclamation in a very arid environment that received six to seven inches of rain a year. Even after you regraded it to get something to grow, it was quite difficult in the long term.

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Swent: Were you still under Balzer?

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Schipke: No, when I went out there, I worked for the mine manager at the time.

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Swent: I see.

00:25:26
Schipke: Those were trying times, and it was very--the environmental movement was still in its infancy; all of these states were starting to pass these reclamation laws. Even permits to open a mine were going to be required--before that they were real general--now they were going to have permits and public hearings. It was all new stuff. The Sierra Club was probably the leading opponent at that time, and we actually joined the Sierra Club so we could get access to their information. They had published and printed a book, *How to Battle Strip Mines*, and they had a battle book that people in the Sierra Club used to wage war against the mining industry.

00:26:14
Swent: You're putting up your fingers, "wage war" in quotes.

00:26:18
Schipke: [chuckles] Yes, that's what they considered it.

00:26:19
Swent: It was war terminology.

00:26:21
Schipke: That was their approach to it also. Those were difficult times, and I never really shed that mantle as an environmental--understanding a lot of environmental laws, regulations, trends in the industry. That was one of the reasons I was selected to go to Trapper Mine and help open that up, because we had to go through the NEPA [National Environmental Policy Act of 1969] process of the environmental impact statement, tremendous amount of permitting. In Colorado at that time, the Wildlife [Colorado Department of Wildlife] was very powerful and were against the mine because of its location in a wintering range of elk. There were difficult problems to have to address, and very outspoken and really radically behaving environmental groups in those days. I worked there for some time, again I'd say 60 percent to 70 percent percent of my work was more in the environmental area than anything else: securing permits, approvals that were needed so that we could develop the Trapper Mine.

00:27:45
Swent: Did this involve a lot of community work as well?

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Schipke: Yes, it did, especially in Colorado, because there was a lot of landowners that we had to obtain their consent on for their long-term use of the land if they wanted it back or they wanted to sell it to us. The community expectations of a large venture like that, because there's primarily an agricultural area, ranching and farming activities around Craig, Colorado. They had certain expectations of an industrial-based operation like a mine.

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Swent: Were the mines similar? I'm trying to think of Shirley Basin [Mine], those were--

00:28:31

Schipke: Those were truck, shovel, and scraper operations. Trapper Mine was draglines, and Navajo Mine was dragline operations. The uranium mines were quite different from the Navajo and Trapper mines, but their mining methodology was similar (i.e. surface mining).

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Swent: Had there been a connection, at that time can you recall, where they were thinking about smoking? Had they made the connection with smoking?

00:29:05

Schipke: Underground? [phone rings] Yes, in the uranium operations they had put that together, the radon and smokers--something like a twenty-fold increase in your chances of cancer if you were both a smoker and if you were exposed to, I think, the radon gas that's associated with the underground, primarily underground, uranium mine. Shirley Basin had some underground, but it was very limited. Mostly it was surface, and that wasn't as big an issue as it was for other uranium operators.

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Swent: Were there lung problems with the coal miners?

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Schipke: No. I think in all my time in the surface mines, there was one case that we had of black lung, and this particular employee had worked back East for many years in an underground operation. It's almost nonexistent in surface mines. You might find it in some preparation plants, or something like that, but very, very rare in surface coal mines. Even though we paid a fifty-cent-a-ton tax to fund black lung [federal medical rehabilitation], there were really no documented cases at our operations, and really in the whole surface mining industry (western U.S.), of employees that had contracted black lung.

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Swent: So your health concern was mainly safety, not--

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Schipke: It was safety. The only real health concerns were: noise exposures of the machinery was high, and just our dust would contain enough silica, that it was more of the silica content of it that was a concern.

00:31:04

Swent: At the coal mines?

00:31:06

Schipke: Even at the coal mines. So really what you ended up doing was going to heavily environmentally controlled cabs on equipment. We (the mining industry) forced the industry--when I say that, forced the OEMs [original equipment manufacturers] to produce airtight, air conditioned, filtered cabs for equipment. That was the only way we could achieve the levels that were required for the health and the safety of our employees.

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Swent: I'd forgotten what OEM stands for.

00:31:42

Schipke: Original equipment manufacturers like Caterpillar, Komatsu. We had to push them hard and so eventually no longer did you have dozers that were completely open to the environment, because primarily of the dust. It was the dust that was the problem; it contained enough silica that it was a health hazard to employees. That was a common problem in almost all mining, and that's why the equipment manufacturers eventually changed. Also the noise levels were too high; you could not be exposed to them for eight hours. You ended up with a lot of sound suppression in the equipment.

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Swent: Not just earmuffs?

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Schipke: No, at the end of the day that was not considered long-term. You could do that for short assignments, but long term, day in and day out running a dozer, you had to go to something other than ear-protection plugs or muffs or whatever. That was something, and it took years for all this. It probably took, I'm going to say, five to ten years before it became standard equipment. Maybe even longer than that, but it was a long slow process.

00:33:02

Swent: And the pressure came from the operators to the manufacturers?

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Schipke: Well, the pressure didn't come from the operators, it basically came from the governmental agencies: MSHA [Mine Safety and Health Administration]. It was more government-mandated, based on studies of the health levels that could be tolerated than from actual individuals. There were a few cases that I know we had settlements with employees that had silicosis, but it was pretty rare. It was more to meet governmental regulations, which of course we all complained about as being too onerous. And at the time, they were onerous, because we didn't have any other options, this equipment was not available. It took five or ten years for it to be designed, and implemented, and debugged so that it was reliable.

00:34:00

Swent: So you used the term strip mine. Were these strip mines?

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Schipke: Yes. Strip mines basically just mean that it's like strips, like a plowed field. Normally most dragline operations are strip mine, because they move very long, narrow bands of dirt to uncover the coal. So they were coined strip mines. Of course that ended up being a pretty negative connotation. [chuckles]

00:34:24

Swent: Oh yes, it's such a bad word that's why I wanted to clarify because I thought it applied to mines that really were not strip mines.

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Schipke: Yeah, but almost all the coal operations were strip mines. Over in Indonesia, the operations I was at later, they were not strip mines. They were basically truck, shovel, backhoe operations, a different design more like the uranium pits. So quite different.

00:35:19
Swent: You went back to the Navajo Mine, did you? After Trapper?

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Schipke: I hate to say it, but I can't remember.

00:35:26
Swent: Yes, you were at Navajo after Trapper.

00:35:32
Schipke: Yes. I went back to the Navajo Mine as assistant to the mine manager, which was an interesting position. Basically--

00:35:49
Swent: That "to the" makes a difference, doesn't it?

00:35:53
Schipke: Yes, basically you had no authority in your position. It was more a financial learning position. This was at the time when MBAs thought they were going to rule the world.

00:36:06
Swent: They did for a while.

00:36:10
Schipke: Yes.

00:36:13
Swent: Didn't they? [laughs]

00:36:16
Schipke: Well, we had some of those around, and there was a lot of emphasis on financial controls, and there was good reason for it. It got to be such a burden to the mine managers to stay on top of all the financial activities required of an operating mine. They saw it as an opportunity to develop an engineer into the financial areas. It was primarily an assignment in budgeting, cost control, financial reporting responsibilities. Basically it was an opportunity to really broaden out an engineer operator into someone who has some financial savvy. I enjoyed it. It definitely broadened out my perspective of the business. I realized mining was not just an activity but was a business.

00:37:10
Swent: You were moving up more into management, right?

00:37:23
Schipke: Then the particular boss there (John T. Atkins)--I guess I did a good enough job and he knew he had enough problems in maintenance. They spend over half to 60 percent of your expenditures at the maintenance department at a mine. And he knew they had very little financial discipline and very little financial awareness, so I was assigned a financial and technical center in the maintenance department, which really was more of a teaching role to teach these mechanics to consider cost when they made decisions. I thought it was a very challenging role that served me well later in life. There are some really down-to-earth people in the maintenance department, and there decision-making

is not necessarily the same as it is sitting in an ivory tower. I found it very helpful and found a lot of lifelong friends in the maintenance department doing so.

00:38:27
Swent: Can you be a little more specific about that?

00:38:34
Schipke: Well, one thing, for example, the maintenance people really didn't know how to analyze a piece of equipment. Let's say it was time to replace a dozer at a mine because it was obsolete or wore out. The maintenance people had certain views as to what was a good machine. But they were unable to articulate those in dollars and cents, on a technical basis even, so they could discuss it with the engineers and the financial people in the company that were making the decisions. Invariably, their views were never considered in the decision making. When I went down there to work with them and regurgitated their thoughts into a technical basis and a financial basis, where we could discuss it with these other people, they had a few whims. Their ways were listened to and they were successful in getting the kind of equipment that was easier for them to maintain. Those were the kind of things that created a good rapport with the maintenance department. A lot of times there'd be an accident, you'd investigate the accident and invariably, in the past, they'd blame it on poor maintenance practices, it would never be operator abuse or poor application of the equipment or whatever it was. In this group I set up, we'd go in and investigate it, truly investigate it, from a maintenance standpoint also. Many of these so-called accidents that used to be classified as poor maintenance practices came to light that it was lack of training by the operators, wrong application of the equipment, et cetera. It ended up really making, I think, a much better working environment at the mine, and it saved a lot of money in the long run. They became more of the team players, they were able to communicate with people and talk in language everybody could understand.

[Minidisc 2]

00:00:02
Swent: I'd like to move on to Escondida.

00:00:30
Schipke: From working a special assignment in maintenance, I worked as chief engineer responsible for most of the technical stuff at Navajo Mine, and we also were involved in trying to secure new business in the coal operations and as contract mining, coal mines, a lot of this was over in Texas and in Louisiana.

00:00:53
Swent: This mine was in the Four Corners area of--?

00:00:56
Schipke: New Mexico.

00:00:56
Swent: Where were you actually living?

00:00:58
Schipke: I was living in Farmington, New Mexico. Since we had the most expertise with respect to coal, they were continually taking engineers from my department, or myself, to go and evaluate these other business opportunities in coal.

00:01:17
Swent: They were not in Australia yet?

00:01:19
Schipke: Oh, we were in Australia, but they were pretty much independent. There was almost no exchange with Australia at that time.

00:01:26
Swent: Kaiparowits, were you up there?

00:01:28
Schipke: Kaiparowits?

00:01:31
Swent: That's the one up in Utah.

00:01:33
Schipke: No, we never went up there. We had some coal leases in Kanab at that time, but uh--

00:01:43
Swent: But that plane accident that killed some--

00:01:46
Schipke: It was near Cedar City, wasn't it?

00:01:48
Swent: It went into Cedar City.

00:01:49
Schipke: The iron mines, yeah. Yeah, it was iron.

00:01:54
Swent: All right, I got too distracted, I'm sorry.

00:01:57
Schipke: My tenure as chief engineer there we got involved in these other business opportunities, and as a consequence of that, I was offered a job in the corporate headquarters back in San Francisco which I took, and I headed up a new group under Bob Hickman.

00:02:17
Swent: You were quite young to have the job?

00:02:20
Schipke: Yes, yes I was. And also some of that was: I was always trying to do new things. I didn't get hung up in one area of specialty. I made an attempt to break out of all those and do a little bit of everything. It was quite different from most people's career in a company. They'd get comfortable in New Mexico, and that's all they wanted to do, or they'd get comfortable in San Francisco and that's all they wanted to do. Or just in the

environmental areas. I wanted to try all of it. I worked for Bob Hickman, which was a very, very fascinating job because we had a lot of opportunities within the U.S., lot of them in coal, and we did look at other minerals, we had copper. We looked at lignite mines in North Dakota, we looked at iron mines in Nevada, we even evaluated buying and acquiring companies, although I have to say that never was a forte of our company. We were better at finding things and developing them than we were active in buying and operating companies, although we did look at some, including Homestake at the time. I happened to be there when the exploration department brought in their annual dog-and-pony show where they talked about all their exploration projects worldwide. I was there when they brought in their announcement that they found a large copper deposit in Chile.

00:04:08

Swent: Who found it?

00:04:10

Schipke: Maybe prior to that I'd like to make the comment that job was interesting because, in my evaluation, Bob Hickman's only words of advice were, "Your job is very simple: You have to work with exploration. By the time it comes to you there will be ten projects. They whittled it down to their ten most viable projects. Out of their ten you'll have a very viable mine, and then you'll have two maybes. And you're going to have seven dogs. Your job is to go take the dogs behind the barn and shoot them. Do something with the maybes; either we'll develop them or we'll bring them up to the point where we sell them off. You're to find that one project in ten that's going to be a moneymaker for the company." Those were my--that was my job description, really. In real simple language, and I always remember that.

00:05:00

Escondida, when they brought it in, four drill holes in it that were spaced out a couple of kilometers apart. When they found tremendous intercepts of copper. Bob Hickman immediately stuck his teeth in and said, "This is that winner and stay with it and bring it along. I want you to go down and get involved with the exploration program, because we're not going to let them look at Escondida for five years and give us a bunch of data." He says, "I want you to go down and help direct the exploration. Let's start looking at the project."

00:05:36

Swent: What do you mean by that?

00:05:38

Schipke: Normally what would happen if you just leave it to the exploration people, they will find something that is interesting, and they'll continue to ask for budgeting, and they will continue to drill around until they completely understand what they think they have there. Then they'll bring it in and hand it off to the mine evaluation and development group and say, "Here is your one hundred million tons of copper at .7 percent. Make a mine out of it." That whole process that the geologist and exploration goes through is minimally five years. Hickman wanted to get involved so we would direct the drilling not so much to delineate and understand the mineralogy of the ore body, but to delineate it enough to determine whether it was viable as a producing mine. At the same time, we had to find the other essential things: the biggest one in Chile was a source of water we had to process the ore with. So he wanted instead of five years, he wanted that reduced

down to two. It was kind of a change; he wanted to get very aggressive, he wanted to--instead of letting the exploration people remain in charge of the project--he wanted us to go in there and take charge with the objective of developing it as fast as possible.

00:07:07
Swent: It must have looked very good to him.

00:07:09
Schipke: It did, it had some complications. The big question that always comes up was who found it, and maybe I'll give you what I uncovered in my tenure down in San Francisco and also when I was down in Chile in talking to the people.

00:07:29
Swent: All you do is just tell your story.

00:07:30
Schipke: My story: first of all, why we were doing copper exploration in general, at that time. Utah just had the Island Copper Mine.

00:07:41
Swent: That was up in Vancouver, wasn't it?

00:07:44
Schipke: Vancouver Island, British Columbia. The average copper grade was like .4 percent. It paid its way, some years it made lots of money, a lot of years it barely broke even. I know some of the MBA boys went back and back-analyzed it and said it probably never was a mine that should have been developed. It gave us expertise in copper. Because of our experience there, copper was never a high strategic mineral. Bob Wheaton, who headed up exploration for Utah, said that he was in the bar with the exploration manager of Getty. Getty Oil that had a minerals division. They had a few beers and--

00:08:39
Swent: Who was that? Sig Muessig?

00:08:44
Schipke: Yes, that's who it was. They were talking--

00:08:50
Swent: Sigfried.

00:08:54
Schipke: Interesting fellow. But they basically were talking, and they were kind of putting together an exploration program for Chile. If you want to hunt for elephants, you go where there's elephants. So let's go to Chile. They decided to have a few drinks in the bar that they'd got with the Getty proposal that was primarily dependent upon a consultant and we come in and co-fund it for 50 percent. It was basically Getty's brainchild, and they relied heavily on the consultant. They got a million-dollar finder's fee out of it; how could I forget his name?

00:09:37
Swent: Lowell?

00:09:38

Schipke: Yeah, David Lowell. He put together, he had the exploration program. It was a very radical approach for what was normally done by both of the companies. It was that you do a lot of office research, you come up with your best theories, you go out and drill three or four holes. If you don't find copper, you move on to your next prospect. You don't sit there and keep on looking in the same location. You move on to the next one and the next one and the next one. He had twenty of these lined out in Chile where the potential for discovery were good. It was his strategy that was followed. We went along, Wheaton went along, basically just because it sounded interesting, and he was interested in having money go into copper.

00:10:38

Swent: He?

00:10:38

Schipke: Bob Wheaton, our exploration manager for Utah. The people on the ground were primarily the consultants. Getty and Utah had no people on the ground. They would send their geologist down there every once in a while to meet with a consultant, review the findings, et cetera. We did some specialized thin section work on some of the ore and microscopic work on the geneis of ore and types of samples, et cetera. The Escondida property was probably about their fifth target, it was not their primary target, and it was probably their fifth target. I can't remember the geologist, but he was a Utah geologist that was quite interested in some of the findings he found on the thin section work. It kind of indicated there were some ores that contained some primary coppers close by, not the oxide. He laid out, as part of this program, four drillholes to sample it. The story was that the Chilean geologist down there that was in charge of it, Francisco Ortiz, called Pancho, a real character, in talking to him, he said it was very difficult because it was up high and he had to get a dozer, because he couldn't get the rigs in to drill the holes that they'd sent him from San Francisco (Utah's corporate headquaters) on a map. He had these holes where they wanted to drill, and to get to them he had to build roads. The fourth one, which was the find, the problem was that the dozer couldn't build the road, he had hit a rock outcrop. They told him now go ahead and forget it. He said, "You told me to do it, so I'm going to do it." So he had to go through quite a process to get explosives up, drill and shoot this hard rock along the road layout. He got the drill rig in and he drilled it. He drilled the hole. It was logged by a geologist. The drill hole cutting were visually logged by a geologist, they drilled over a hundred meters of very, very high-grade copper that was not recognized by the geologist. The ore samples went down to the camp where they sat for two days, until somebody—one of the more senior geologists—happened to be looking at them and said, "That looks like high-grade copper," and had it analyzed and came back with over a hundred meters of 2 percent copper.

00:13:46

So some of the details of how it was found was really pretty interesting. So then they went out and they drilled another hole, and they found in the same ballpark of copper mineralization; it was very high grade. Then they stepped out a couple of kilometers, then they stepped out a couple of kilometers in the other direction. They came out with these four drill holes that they brought to San Francisco that were just phenomenally rich, the kind of grades you just don't see in copper mines anymore.

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00:17:06
Schipke: He was our head of the office in Santiago, he was Chilean, very experienced mining man. He was the one that made that decision, and I think he might have been a lawyer by training, I can't remember. That's how Escondida was found. That's the history of Escondida, a lot of little things. There was no great big thing. David's strategy was an excellent strategy which I strongly supported, and it's something that we started using more elsewhere. Instead of getting more useful exploration elsewhere, we're instead getting bogged down, instead of keep moving, always looking at your best prospects.

01-00:18:24
Swent: It's been a phenomenal mine.

00:18:23
Schipke: Oh, it has been. The more we drilled it, the more we looked at it, the richer it got. When I went down there, they wanted us to understand what it was like doing business in Chile, which sounds simple, but it's pretty complicated. The biggest problem I had was finding water. For every ton of ore processed, you have to have two-thirds of a ton of water. A tremendous amount of water is needed to process this. We still had to secure the rights of way to transport the copper concentrate down to the coast, and I also had to locate a secure port site. All of those were interesting stories in and of themselves.

00:19:10
Swent: That's why we're here.

00:19:13
Schipke: Yes.

00:19:14
Swent: You're the story.

00:19:16
Schipke: Well, the port site was very interesting because we--typical engineers--we went and looked at probably five sites identified. We had a lot of experts come out of the States to come down and look at the sites to see what would make the best offshore port for loading the copper concentrate. We had about five sites, and then you had to tie it into the rail systems or road haulage or stand-alone slurry pipeline. Stan Johnson was in Santiago, an engineer also, and the two of us were basically running the activities down there. We both quickly eliminated three of these as not being very practical, and it came down to where we had two sites. Even between us, we said there really was only one practical site, and that was the Coloso site. The other one you had to get right-of-way all the way through Antofagasta and use a rail system which we knew would never fly. There was a lot of ownership problems, and Coloso was the only site to do it. People in San Francisco wanted to take as much time as possible to study it, and one day our local council in Antofagasta, which is where I was stationed at the time, was playing poker with some of the government boys and they had heard rumors that we were looking at a port site, and in particular in Coloso. He called me up in the middle of the night and said what he found out at his poker game, and that these guys are aware of it, and there was some talk that we (poker players) should go stake that area so that we'd (BHP) have to go with them and pay them a lot of compensation. He called me up and we rushed down

the next day and drew up what we thought was the Coloso site and filed all the necessary papers so we could have the mineral rights plus the port right application ahead of anybody else, which we did. About a week later we found out that the site that we'd described was located about four miles offshore, we'd made a mistake in our legal description of it. [laughs] But they allowed us to make an amendment to get it back onshore and it all progressed smoothly after that. I can't remember the lawyer's name, but he was of Turkish descent. Interesting fellow also. If he hadn't called me, and he hadn't been playing poker and heard about these things, I don't know what we'd have done for a port site, but it would have been more difficult to develop the site.

00:22:06
Swent: What governmental agency were you dealing with? Was this a federal-national government, or was there a provincial government?

00:22:20
Schipke: That was, that was something that was--

00:22:19
Swent: Chile doesn't have provinces. What do they have?

00:22:25
Schipke: They had regions, and at that time you had a military governor is what I'd consider it, like a governor of a state, but he was a military governor.

00:22:37
Swent: This is Pinochet?

00:22:38
Schipke: This is under Pinochet. He reported on paper to Pinochet, directly to the top. He also had quite a Santiago command in the military, who Paul Gondeneau, our representative in Santiago, knew. He says, "If you want anything done, you go there." The military governor at the provincial level says, "If you want anything done, you come to me and I can go to Pinochet and get anything we need." So we had a little controversy over this port, which suddenly became very, very critical to us. I ended up going in to see the military governor and see what he could do to help us. He was extremely helpful and he pushed it through and he got Pinochet's signature on that port concession. He did that at the local level. They were pretty autonomous in their ability to make decisions, and he was extremely cooperative. People say dictatorships are not good, but if they're benevolent, they're extremely effective, and that military governor was extremely effective in making things happen to assist the program in the project. I had nothing but the best of time for him.

00:23:54
Swent: Did you have interpreters?

00:24:01
Schipke: Yes, I never would go into a high level meeting like that without interpreters. That particular military governor at the time, I can't remember his name, had actually gone to West Point for two years. Attended West Point, so he could speak and understand some English; I could speak and understand some Spanish, but we both worked with interpreters to make sure there was no misunderstanding. That was interesting, and you

definitely knew these (military) boys were used to having their way. As a military governor they answered to Pinochet and that was it. They were extremely helpful for the project, and that was a real plus.

00:24:42

Swent: Well, you mentioned the water also. How did you get the water for the slurry?

00:24:45

Schipke: The water was the one that was the real monkey on my back because basically we couldn't find any. Then we went out and hired a consultant; he was out of Berkeley--I can't remember his name--very well known. He then helped us, but the problem was there were no existing geologic maps of the areas of where we were looking for water. Everybody believed we were going to be able to drill two or three wells and find some good volumes of water. At the end of the day the target was wrong, and by the time we had it all mapped, which took us almost a year, everybody was really anxious. The Jim Currys of the world would call up almost every week and say, "How you doing in finding the water, Mr. Schipke?" [chuckles]

00:25:47

Swent: Jim Curry was--

00:25:51

Schipke: Well, Jim wasn't bad, I'm trying to think of Keith--what was his name? Wallace. Keith, oh he's been over in Australia, too. Very nice, but he was under pressure. Hickman would call, these boys (Wallace and Curry) would all call wondering where the water was, and he'd try to say, "I just need more time," but they felt we didn't have a lot of time. But basically we had to go around and remap all of these salars, and ultimately--

00:26:22

Swent: All of these what?

00:26:23

Schipke: Salars. They're internally drained depressions that held water, but they were salty, brine. Around the edges you'd find fresh water. Ultimately--what was his name? I'd never think I'd forget it because he was very helpful ,out of Berkeley. He basically said that there are no great aquifers, and we're going to have to set up a system where we will mine the water that's floating on top of all these brines at these salars, and that's ultimately what we had to do. We eventually had to accept that that was our source of water. Instead of drilling three or four wells, we were going to have to drill twenty-five wells. But we did have a source of water, and it was suitable for the project. Later on, after I left, we were going to go another fifty, sixty miles and look at another basin that wasn't a salar but should have had some high quality water. They did find that in the salar in the Monteraqui basin. We had enough water, but it was probably another two and a half years probably in getting a reliable, bankable source of water for the project. That was a lot of heartache, but we got there.

00:27:40

We did that through going back to the basics: do the geologic mapping of the area, drill out your potential, high potential target areas. Assess it every step of the way and eventually we drew a picture of what we had there for resources and determined that it was sufficient for our needs, but it was just a very basic approach and tenacious nature

is what it took. We got the water and that was a difficult one. And the other thing I did that was big at that time was that we had to sink a shaft--800 and some feet--shaft to test the ore body and get large-scale metallurgical samples to make sure we were able to process the ore and had to bring in a contractor from Canada to do this. It was a big operation to sink this shaft and it took us a couple of years.

00:28:45
Swent: Who was the contractor?

00:28:46
Schipke: J.S. Redpath was the name of the company.

00:28:53
Swent: Now when did you go down? Did you reside there?

00:28:57
Schipke: I resided in Antofagasta; I was there a couple of years. We basically put it all together and showed all that it would need to develop the project. We had good conceptual designs and some detailed designs of the processes and the layouts and the milling process. All this was laid out and costed and basically we put together a bankable document (i.e. we could go out and finance the project). And then what ended up happening was that financing was going to take a couple of years, and despite all the long hours I put in on it they said, "Well, we need you elsewhere." They shipped me back to the coal mines back in New Mexico, and I left the project to Ken Pickering, who's still there today.

00:29:50
Swent: Sounds as if you're a little regretful?

00:29:54
Schipke: That's probably one of the few things--I'd like to have stayed with that project and seen it through, but at the time I was regretful. But now I enjoy the variety I've got in my career, and he's still doing the same thing he was, just at a higher level. I'm quite content, and I think Ken's probably quite content in how it all worked out for him also. At the time, I have to say that I was pretty disappointed in the company. I didn't mind coming back for a couple of years, but when the decision was made to go forward, I was hoping to have a position in that. Instead I wasn't. I was volunteered to go to Australia for the Mount Newman operation.

00:30:41
Swent: There often seems to me to be a crisis when this initial period ends, and it is handed over to an operational group. That seems to be a critical time.

00:30:57
Schipke: It is. It is because they're a lot like when a CEO comes into a company the first thing he does is check the accounting books and say, "The other people that haven't written all these things off, they got all these bad projects. Get rid of them, take a big loss, and start over fresh." It's not a whole lot different when you got a different group of alliances within a company. It wasn't like that with Escondida because we went down there and we lived in the same room for those two years. They were still doing the exploration around Escondida and the Zaldivar project, so they--it was never like that. They were

more interested in moving on, they were more interested in finding other things. Sometimes in the project we had to force them to go back and give us more detail within the ore body. That wasn't exciting to them, so Escondida was a perfect handoff. I've been to other projects like you're talking about, it's a disaster.

00:31:56

Swent: The geologists don't want to let go often?

00:32:00

Schipke: They don't want to let go, and somebody there has come up with a development plan and the development plan doesn't fit. It's wrong. It hasn't been enough detail, it's not working. There's a lot of hard feelings and finger pointing going on and it's just a rough time. Escondida wasn't like that; it was great. The Zaldivar project was interesting, too, because that had some history in it.

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00:35:57
Swent: Exciting.

00:36:05
Schipke: Yeah. So, I've moved out and came back and worked at the San Juan Mine as a mine manager. I'm quite comfortable back here. I was called in by my boss one day, John Atkins, (my boss's boss) and John Atkins said, "Paul, they want you to go to Australia. Something's brewing over there, they'd like you to go to Mount Newman Mining." I said, "John, I just came back from Chile a couple of years ago. I'm just getting set in and I'm not sure I want to go to Australia and deal with all those unions." He said, "Paul, this isn't the army, but you're getting volunteered army style. Jim Curry's going to be down tomorrow to talk to you about going down to Australia and it would not be good for your career if he was told 'no.'" So Jim Curry came out the next day, and I said I'd be delighted to go to Australia to work at Mount Newman Mining Company.

00:37:01
Swent: Yes, sir!

00:37:02
Schipke: [chuckles] Yes, sir. Jim Excell was coming back.

00:37:05
Swent: Who was this?

00:37:07
Schipke: Jim Excell. He was the manager of the ore processing plant at Mount Newman Mining.

I was to go over and do his job as manager of the ore processing plants. I was interested from the standpoint I had never run those processes before. It was interesting from that standpoint.

00:37:33
Swent: It was fully developed by then?

00:37:35
Schipke: Well, they were developing a new little mine, four-million-a-ton iron mine next to it and a new process with that, that turned out to be a real nightmare for me. So it was an old mine for the majority of it, but they were trying to get into these new satellite ore bodies with a new type of ore. It was technically fairly challenging. I agreed to go--

00:38:02
Swent: We haven't mentioned your family, but did your family move to Chile with you?

00:38:06
Schipke: Yes, yes. At that time--

00:38:10
Swent: Your wife and--

00:38:11
Schipke: When we went to Chile, at that time, I'd gone through a divorce prior to that, and Julie and I had married and--actually we were married in March, and I think our first month

of marriage was celebrated in Santiago, Chile. So I got married, took a couple of weeks of honeymoon, and went straight to Chile. She was with me the entire time, and two of my children came down, too, from my previous marriage. Julie's been with me in Australia and also in Indonesia, along with the children.

00:38:53
Swent: You were moving a family from Chile back to the States and then to Australia?

00:38:55
Schipke: Yes, it was pretty disruptive.

00:38:58
Swent: Well, okay. I just wanted to get that in a bit.

00:39:04
Schipke: So I agreed to go to Mount Newman and Jim Curry told me there were some things that were going on, and he says, "You'll understand when you get there," but he was very nonspecific. They asked me to go to San Francisco and talk to a few people about the situation in addition to the terms and conditions of working in Australia. I was pulled in by a couple of Australians, HR people, human resource people, and was told that there was a strategy that had been put together that was not going to work, and it's going to be very difficult with labor relations. Then I decided to go down a month before the family. When I went down before the family came down, I got there when all of this was coming to a head. Basically the strategy that had been devised by the general manger of the Newman operations down there, a South African, and he decided that he was going to follow the footsteps of the Robe River labor dispute down there.

00:40:21
Swent: Robe?

00:40:24
Schipke: Robe, R-O-B-E. Robe River. That used to be owned by Cleveland-Cliffs. Who owned it at that time? I don't think it was the Cleveland-Cliffs. I think they were the only American firm in it, and they were pulled back. They basically shut the union out, and the staff people operated the mine and broke the union. He had planned a similar strategy for Newman, and he hadn't done the detail and preparation, and he wasn't really prepared for it. The whole thing blew up about the time I got there. The unions went on strike, all six unions went on strike, management attempted to operate the mines with staff. Half the staff went out in sympathy with the unions, and the other half stayed in. The town was divided, we had tremendous--and Jim Excell, I put him on the plane just before the picket lines were put up, I had to almost pour him on the plane; he was so happy to be leaving that he drank almost too much. [chuckles] He was so glad to leave, the next day, my first day of work, I had to drive through the picket lines, which were very vicious, to go to work. I got there in time to find out the strike was on, none of the union employees were coming to work, and the decision had been made that staff was going to do the jobs of the union people. Roughly speaking, there was two thousand employees at the union operation: 1,700 union people and 250 staff people.

00:42:17
Swent: You said there were six unions.

00:42:18
Schipke: Six unions.

00:42:20
Swent: That's a lot of unions.

00:42:21
Schipke: A lot of the problems were they were fighting for turf among themselves. Terrible, terrible labor conditions. So I got there and we went into a crisis mode. We determined the next day that we were going to operate the equipment ourselves: load trains, mine ore, we were going to run it ourselves with 250 people. Soon as that came out, half the staff quit and went out in support of the union. To do that, I had to bring in all my foremen. I had about twenty-five foremen and superintendents working for me. Twenty-five, thirty, I can't remember how many. I brought them in one at a time. Everybody else said, "No, just ask them the questions in the general public meeting and ask them if they'll work or not. If they won't work, you got to fire them." I said, "No, I'm not going to do that, I'm going to do individually in private session with each one of them," which is what I did, and it took all day almost. I brought them in one at a time and I said, "Hi, I'm your new boss. I just started today. I'd like to talk to you about this strike situation and really have got to ask whether you're going to operate equipment."

00:43:49
It was a pretty traumatic time, and about half of them were fired over that. I had to fire them because that was a directive from the top. The only one I didn't fire was my secretary. I said, "You're not going to operate equipment, you're going to help me, so don't you even worry about it, you are going to be doing your normal job." I didn't ask her, but a lot of the people were told to ask their secretaries if they can go off and operate equipment that was usually done by the union. We ended up with a divided staff: half of them supported the union, half of them didn't. I think we loaded one train, and then the whole thing just kind of fell apart. For two or three weeks it was chaos. They got very militant in town. It wasn't safe to go downtown, we had to--there were four policemen in this community town; they sided with the union. We eventually had to go over their heads and go to Perth. First thing we did was hire a security firm with six or eight, basically, bodyguards to protect some of the high profile individuals at the mine. It was really rough. They were firebombing swimming pools, throwing brake fluid on cars, shooting windows out with slingshots--not guns, but slingshots--out of vehicles and some houses. I had a young foreman call me one night and asked me what to do. He says, "You're my boss, I need some help." He said, "I got a bunch of drunk union guys outside my house and they've threatened to break down my door and rape my wife." I said, "Well, call the police." He said, "Well, I did. The police just asked me if I'm staff or union, and I said I'm staff of course. They said, 'You deserve everything that happens to you,'" and they hung up on him.

00:45:54
Swent: Oh!

00:45:58
Schipke: So some of the things were pretty ugly at that time.

00:46:01
Swent: Were the houses owned by the company?

00:46:01

Schipke: Yes, all company houses, most of the vehicles were company. So it was a really, my firsthand knowledge of how militant some of these people can get, how vicious some strikes can get.

00:46:16

Swent: What happened to this young man that called you?

00:46:19

Schipke: Well, they didn't come down his door. I said, "Get yourself a baseball bat and wait." A lot of name-calling and threats, but none of them went through the door. A lot of people couldn't, didn't want to go to the grocery stores or the liquor store which was a big seller at the time. The women in town were very interesting. They made a real effort to keep all of this out of the schools and out of the stores as much as possible. I have to say that in looking back at it, I think they did a really good job in keeping back all the violence and the ugliness away from the families and places where the families would go. So the women did have a real calming effect there, but after hours and on the picket line, it was pretty rough, pretty rough.

00:47:20

Swent: The women didn't join the picket line?

00:47:22

Schipke: Some of them, and I guess the one image that I'll always remember at the picket line is the image of the young woman with the child at the picket line. The child was two, three would have been maximum age, and she had taped the child's hand such that the middle finger was up and the other fingers were down. When we went through the picket line she waved her baby's hand at us.

00:47:44

Swent: Oh my!

00:47:45

Schipke: There were some women on the picket line, a lot of beer on the picket line, a lot of inebriated employees on the picket line.

00:47:54

Swent: Was anything aimed directly at you?

00:47:59

Schipke: Oh yes. You had to drive a company vehicle, and I had my side windows of my vehicle knocked out, dents put in the doors where people hit it with clubs or something so the doors were knocked in. Back windows in my vehicle were shot out with slingshots. Front window was fine, and side windows, so I never personally suffered any injury in it at all. I was an unknown face because I just arrived there. I wasn't a well-known management person and there were of course certain people and supervisors in management that they were really hoping to get their hands on. In that way I was quite fortunate.

00:48:40

Swent: Did the government step in?

00:48:46

Schipke: Well, so after we got--we had to bring the security guards in, and that calmed it down a little bit. Then we had to go outside the district and they brought in, I think it was over twenty police, which would probably be the equivalent of the highway patrol. They brought them in from other shires or other counties that were completely non-mining counties. They brought them in there and established order and put a lot of them on the picket line so we were able to pass through the picket line without risking ourselves. They did restore order; it took a while, it didn't happen overnight, it seemed like forever. There probably was a two-week period there where it was pretty rough. That was my welcome to Australia.

00:49:41

Swent: Did they make some sort of--what happened then? How did they resolve it?

00:49:47

Schipke: Well, so basically Jim Curry fired the South African that was the head of it. Gordon Freeman was his name, he was from South Africa. He fired him, which was a high-level move that was critical to appease the union. The union, depending on how militant they were, they started drifting back to work. First the staff came back, and then like the electrical workers, the electrical union, the mechanics came back. They slowly got back to the most militant ones which was the truck drivers and the shovel operators which were in the mining division. They brought in new management from the outside. They brought in Bob Kirkby from the Queensland Coal operations to head it up. He was a fresh face also with iron ore. We brought in different HR people, most of them came from Queensland Coal, so they were unknown people to the union, so the union kind of got a fresh start, so that kind of helped appease it. They came back physically to work, but they didn't work. It was unbelievable what went on after they came back to work, a lot of hostility, any excuse not to work, a lot of sitting around, people just refused to do anything. You go out and shovel operators are putting twenty ton in a two-hundred-ton truck, and things like that were happening. We were going through the motions, but nothing was really happening.

00:51:40

Swent: What was your job?

00:51:43

Schipke: I started out in ore processing, which was basically we crushed the ore and we did run it (a portion of ore) through a processing plant that upgraded the lower-grade iron ore, and then we loaded it on a train that railed it down to the port where it was exported. So that was my job at that time, the processing plant. It was tough because I had to bring my staff back together; half of them supported the union and the other half stayed in and worked. Some of it would be brothers: I had two brothers and one brother stayed in and operated the load out. His brother went out and supported the union. It was almost like the Civil War, you know, so I couldn't even get these guys hardly to talk to one another. Some of them wouldn't even sit in the same room. Really so you had all of these confrontations between staff, between staff and hourly, between union leaders. Union leaders demanding this and that. It was just--it was extremely chaotic and difficult. I did get the ore processing back to working; it took a lot of talking, a lot of hours. I had to make peace between various factions. Some of this stuff, they tolerated one another but it was never the same. Some of it got kind of vicious; we had lots of grievances over,

"Well, he made an obscene gesture to me, he told me I was an SOB," or whatever it was and we'd have to sit and go through this for hours and hear him out and talk about it.

00:53:33

So when they brought in the new management, and started getting that organized, they brought in Bob Kirkby. I suspect Jim Curry must have talked to him, because they took me out of my nice ore-processing area that I had headed, back to where it was running, and I was starting to concentrate on fixing the technical things plus the work practices. They wanted me to go up and run the mine then. The mine was where the problem was: the shovel operators and the truck drivers were absolute, unbelievable militant people. They'd been able to get away with things for years. So I had to go up and run the mine and it (really--the technical aspects, well, we had problems there, too, because before the strike occurred), from an operational standpoint were in very poor shape. Nobody was really working, but we continued to mine the ore. What happened was the mine was high-graded. There was little or no more ore to meet our contracts. (Because there was rock sitting on top of ore, which we had to move first.) I had to sit down with the engineers and go through a plan and the plan required two and a half, three years before we could comfortably have operational flexibility to meet our contracts. In six months we were going to run out of some ore types, and we had all these contracts with the Koreans and the Japanese, and you know, what are we going to do? It was pretty scary times. We weren't sure we were going to find enough ore to meet our contracts, plus there were other contracts that we were going to have to cancel.

00:55:13

Swent: You said contracts with Korea?

00:55:14

Schipke: Korea, yeah. Korea and Japan were the two major customers--some were to China, but Korea and Japan were the bulk of our markets.

00:55:24

Swent: You worked that one out.

[Page 27a is sealed until January 2025.]

00:57:01
Swent: I guess I don't understand the technicality of that. You couldn't use that?

00:57:03
Schipke: No.

00:57:08
Swent: Why not?

00:57:09
Schipke: Because the pit-wall, the ore, you had like six hundred feet of rock that had no ore in it. Underneath the six hundred feet was your three hundred feet of ore. That upper extra six hundred feet broke loose, and break loose maybe two hundred feet, three hundred feet deep. It put a million, two million ton of rock right down over the top of all of our ore benches. You couldn't just go in and mine the loose rock because it was the size of a house, and things like this. We had to literally start at the top and work our way down. We had to handle very difficult conditions. It was a long process. We really had to open up other areas of our mine where we could get the ore faster and then come back later when we were in a better situation to mine under the failure. And we weren't sure that technically they put a lot of work in putting rock bolts in the wall to make it safe and stable. It didn't hold up. Even when that failure did occur was the first time that it ever happened in the history of the mine. I had a young engineer that inspected the pit for me. I was legally responsible for the pit, and I went and had him check the pit that day for me. One of our foremen had noticed cracks developing up in this wall. He came in and looked at it and said, "You better come look at it, we've got these cracks developing up in the wall." I went up and looked up at the wall and I got on the mine radio and said, "Evacuate the pit!" Of course people said, "What's this all about?" But they did evacuate, and as the last truck drove out the whole wall--I was standing there and watching--the whole wall slid down into the pit as the last truck drove out.

00:59:05
Then I had a problem because the blasting people had loaded this bench of ore at the very bottom, just where the rock stops. We had all these loaded holes, and you can't unload holes, you got to fire them. We reported it immediately to the mines department, this safety, that this failure had occurred which was a requirement of the law.

00:59:33
Swent: The government?

00:57:09
Schipke: The government. Yeah, the government, West Australian Mines Department. They said, "Well, barricade it off, and don't let anybody in there." I knew that we were going to have a problem, because that rock was going to continue to slide down that face and was going to cover up these holes that had, I don't know, maybe five hundred tons of explosive in it. It was going to have to sit there for a couple of years before we could dig it out. It was going to be a really bad situation. So I asked for volunteers and it mostly ended up being staff. We had a couple of union guys that helped, who went in there and wired the shot contrary to what they instructed us to do, and I shot it. When I did shoot, more of the wall slid down and completely covered the whole area. I felt that was a prudent thing to do for the safety of the mine. The mines department, I always remember, came in there and hinted around and said they were going to cite me for

violation. Even a criminal basis, you know. I never forgot that. I felt it was a prudent thing to do, those explosives would have sat there for two years, covered up with all this rock, and then we'd have had to mine down through it. It would have been very, very dangerous to the people. It was one of those things where the decision on the ground (I still support and believe I did the right thing) is right. The mining department made a decision sitting at the other end from a phone call. They, BHP, eventually went back and cleaned up that whole wall after I'd left Australia and mined down to those areas to recover a lot of that ore.

01:01:20

That was a tough time, but the real problem at Newman was labor relations, the difficulty with the unions. The unions were used to having their own say. What they were used to doing was causing trouble and then negotiating some kind of concession from the company. Some of them were ludicrous concessions, but just get a concession and they'd come back to work. That's kind of the process they'd fallen into. "We'll go out on strike, you come and talk to us, we'll negotiate for a little concession so we can show our troops that we won something, then we'll come back to work." And they do this whenever they want to. When I was there, I kept track of how many hours I lost from industrial dispute, that I was shut down. I remember the first year I went into HR, the human resources department, and I says, "I'm really disgusted. Despite all of this work, all of these new negotiations, all of this effort, I still had the guys went out on strike, I think it was, twenty-six or thirty-two days out of 365 contrary to our agreements." They looked at me and said, "You should be happy! We only started looking at records five years ago, and this is the best it has ever been in five years."

01:02:44

Swent: Oh my.

01:02:49

Schipke: These people were used to going on strike all the time.

01:02:53

Swent: But who was the, what do you call him, the premier or prime minister--whatever they called him--the national government at that time?

01:03:05

Schipke: The prime minister then was [Robert J.L.] Hawk.

01:03:02

Swent: Was he the Labour Party?

01:03:07

Schipke: Yeah, but he also, at that time, did take on airline pilots and was quite famous for that. Yeah, they felt pretty comfortable with him because he came up with the Labour Party. Very difficult times. The first, I should tell you, the first incident I had with the union after they came back from work and they had negotiated a new agreement where they weren't supposed to go on strike--well, we hadn't negotiated that yet. I don't remember what the incident was over, but they went out on strike and I said, "Well, the shovel operators went out." I says, "Well, that's fine." Then the truck drivers then parked up because there's nothing to load their trucks with, so they all sat and played cards on the company pay for the whole time. The union kept waiting for me to come see them. I

said, "Nah, I'm going to do it my way." Bob Kirkby was the person from Queensland, he said, "Okay, fine, have a go at it." I said, "Okay," so I wouldn't go talk to the union. They sent someone in to see me, they sent a runner in to see me and they said, "Paul, call Eric," he was the head of the shovel operators. He was their union rep and state organizer. "He's waiting for you, you know, this is his phone number in case you don't have it." I said, "Okay that's fine, but I'm not talking to Eric. I'm not talking to any of you guys until you guys come back to work." They kind of look at me, they go away, and my supervisors came in and said, "Jesus, these guys have been talking to us. Paul, you have to go talk to them, that's how we always do it. You have to go talk to the union and you got to make some minor concession or apology or something, and then they'll come back to work." I said, "No, I'm not going to do it that way." So the union sent another guy back, and he explained to me that I didn't understand how it worked in Australia, and because I was a Yank, I didn't understand how it worked in Australia. I said, "I understand that's how it used to work here, but I'm not going to talk and negotiate with the union until you guys are back working here on the job." The next day they stay out for twenty-four hours, the next day they came back to work and they never talked about the incident. After that they knew there was no negotiating with Paul, and he'll only talk to you when you're still working. You got a grievance, you take it up with him. He'll come out in the middle of the night and he'll talk to you, as long as you're still working.

01:06:02

That was a very fundamental change, simple but fundamental change that I introduced on the hill. It made a big difference over time. Over time the boys just kept working. The silly little things they'd go out on strike over got to be less and less. It was just a change in attitude. I said, "No more, I'm not negotiating anything. I'm not talking to you guys when you're not working." They'd been used to that, they'd fallen into it. Management had fallen into the trap and didn't realize what they were doing, they didn't see that. You're your own worst enemy, you know, you're just your own worst enemy. So that was some of the changes. Then I actually was successful in terminating a couple of employees. One of them was for assaulting a foreman. We ended up, you know, a pretty serious charge, and I took it up. And they said, "You don't terminate an employee for anything. You can't fire a person at Mount Newman." "Well, we'll find out," and I did get backed by Bob Kirkby and the HR people and they took it all the way up. We had to go to the commission on it and made it stick. That was quite a change in attitude then, because people actually got terminated. Then after that we had a few others that got terminated, and in the beginning it was for the assault of a foreman. It was kind of rough. There was stealing of property that we were able to uphold some termination for. So that slowly made them change their ways, so people started working harder.

01:07:31

Then we went through long negotiations on changing work practices, and they kept wanting more money. And they were the highest paid worker in the industry; we can't give you any more money. They said, "Then we can't give you any work concession." We were kind of at a stalemate, so we kind of renegotiated the whole thing. So then it was the union pitting themselves against one another trying to get work that was being performed by another union, because they wanted more members and all this. This went on for the longest time. One time we went to Perth and spent twenty-four or twenty-eight days locked up with union members negotiating these work practice changes. All

of this and a new way of working together. No more strikes, got to go through a grievance process, real fundamental stuff. Real fundamental stuff here in the States, but it was really hard-fought and resisted by those people.

01:08:36

Swent: So there was some, in a sense, there was some resentment of the Yanks coming in, that was part of it?

01:08:46

Schipke: Yeah. Probably more from management than the actual workers. See, Australians are kind of a class-conscious group, believe it or not. I mean when I got there you didn't--

01:09:01

Swent: Excuse me, I'm going to move this mike just a bit, it's there. There, it's better.

01:09:07

Schipke: Okay, they are kind of class-conscious. When I got there all the socializing was done strictly hourly people, strictly salaried-management people. There was no crossovers to speak of other than a common community function. There was no entertaining with your workers, or talking to them cordial when you met them downtown, but you never did anything with them. That was just unheard of. All your socializing was done with people of your same level. Julie and I used to have friends that she'd met at school that were truck drivers or shovel operators or dozer operators. I'd have them over at the house, have a beer with them, have dinner, play cards, things like this, which was just unheard of. Management people were just shocked. But the hourly people, they kind of looked at these people: what's going on there? At the end of the day I treated them all like human beings. It made a difference, it made a difference. I felt that probably more of it was coming from the Australian management people than it was from the actually hourly workers. Really at the end of the day, they were just as hard to change their practices if not more so than the union people. The union people were bored to death with their jobs; they wanted some variety, they wanted to do something different, they wanted the freedom to perform their job. They wanted to go home at night saying, "Hey, I did a great job today. I accomplished a lot, it was a worthwhile day." Most of them didn't have that opportunity because of all the work practice restrictions. So the average hourly person wanted change, and a lot of the problem was with management. The biggest problem was with management. In reflection on it, the biggest fight was probably within management itself. But yeah, the Yank, he definitely thought differently than they did, and he didn't have to live with all those people, he wasn't threatened with being blacklisted if they ever wanted to go to another operation and all this kind of stuff, you know, which did occur. So it was probably the toughest years of my career and very stressful, too.

01:11:29

Swent: How far is Mount Newman from Perth?

01:11:31

Schipke: Twelve hundred, eighteen hundred kilometers. It's quite a ways. You're really isolated, very isolated. Dirt road into it. There's a little strip that they fly a plane in there once or twice a day, but if you drive in it's dirt. Now I think it's all paved, but part of that was dirt. It's just bush.

01:12:02
Swent: Who were the workers? The local people? Where did they come from?

01:12:08
Schipke: From about fifty-six different nationalities. Generally what you find over there is that most of the immigrants ended up out in these remote locations.

01:12:29
Swent: And where were they from?

01:12:31
Schipke: I had a lot from Yugoslavia, a lot of Slavic nationalities. A few Russians, a lot of English, a lot of English and Irish. They were the more militant union leaders, but a lot of those from middle Europe. We had a few Iraqis, and this was during the first Iraqi Desert Storm conflict, but I think we had three Iraqis that worked on the site. We had an Islamic mosque there, so there was quite a variety of people, although we only had, I think, two Aborigines in the whole mine of 2,000. One of them worked for me and was a dozer operator, excellent employee, but very difficult. Their people never stuck on the jobs. I'd have to say that half the people were immigrants, first-generation immigrants into Australia.

01:13:43
Swent: Were there any language problems?

01:13:48
Schipke: Some. Language, when you get right down to it, you don't need a lot of language to be able to communicate. It's the cultural differences and behavior patterns that are the problems. There were language problems. There were a couple of teachers that taught remedial English to these workers, and we had programs in the community to teach English so they could better understand the skills. But a minor problem. The cultural differences in how people approach life and work and all that is the bigger issue. The people from Middle Europe they were hard workers, they treasured their jobs, but they were more than willing to go along with a work stoppage or whatever, you know, but they treasured their jobs. The English and the Irish, man, they had--strong unionists and they believed and treated it almost like a war between management and union workers.

[Minidisc 3]

00:00:27
Swent: You were in Australia at Mount Newman and you were about to tell me about bludgeries?

00:00:41
Schipke: Bludgers.

00:00:42
Swent: Bludgers. Okay, what are bludgers? [chuckles]

00:00:44
Schipke: Well, maybe before we should get to bludgers, I should tell you a little bit about--so people can appreciate what some of the union and management conflicts were about, and then we'll talk about the mentality of bludgers.

00:01:00
Swent: Okay.

00:01:01
Schipke: Basically when I was over there I experienced strikes over very ludicrous demands. I had people go out on strike over poor quality of meals because some truck driver decided that he was unable to cut his sausage with his fork. He said the quality of the meals had deteriorated to the point that the union was obligated to go on strike.

00:01:26
Swent: Now what meals were these?

00:01:32
Schipke: We had to provide almost seven-course meals for breakfast, lunch, and dinner to all of our employees. Hot meals, and they came in for hot meals. There was no such thing as a sack lunch or anything like that. These were hot meals that were brought off the machine, brought into a cafeteria, and they were allowed to have hot meals buffet style up to and including choices of ice cream for desert. Any change in that was considered a deterioration of standard of meal, which was considered a deterioration in work condition.

00:02:06
Swent: Goodness. So you were running a whole feeding operation there.

00:02:09
Schipke: Yes, it was very disruptive, but people went on strike because somebody couldn't cut his sausage with a fork so the whole mine would go on strike. I had people go on strike because their air conditioner in their house was not fixed within a half hour of reporting it to the company that it was broke down. So the response time was too long so they went on strike. There's cases where they went on strike because of meals again; because they only had two choices of ice cream instead of three. They ran out of chocolate so they only had vanilla and strawberry to choose from. That was a problem. Can we take a break here?

00:03:00
Swent: It is beginning to get pretty late.

00:03:02
Schipke: But I would like to finish Australia.

00:03:04
Swent: Could we finish first?

00:03:16
Schipke: So I wanted to give a little cross-section of what some of these strikes over.

00:03:22
Swent: Okay.

00:03:25
Schipke: The response time to fix an air conditioner at a person's residence, they go on strike over something like that. They came up with a brainstorm once that they needed fans to

be installed on bus doors, because when you entered the bus, the fans would blow the flies off your shirt. They said that was a safety concern because a fly might distract a driver and cause an accident, and they were prepared to go out on strike if I wasn't willing to agree to such a change of all of our buses. These were some of the more ridiculous types of issues they were comfortable with going on strike for, and they felt quite strongly that this was an erosion of the work practices that they'd established over time. They also had the mentality of a bludger, and the person who told me what a bludger was, was the union rep for the CMU--it was the union that was responsible for all the equipment operators; all my dozers and graders, this kind of equipment at the mines. They operated this kind of equipment at the mines, they operated this equipment. He came in and told me that I didn't appreciate a bludger. A bludger is someone who's able to work at a company and perform no work. The fact that he can get a salary and perform not one lick of work is a great status to be achieved in Australia. To be good at that you can be known as a bludger. He said that that is a respected position, and you should not take that away from the union because those people really believe in that respected position. This guy's name was Russell McPhearson, and he had been used as an example to show how the union leaders spent no time doing their higher jobs, but spent all of their time performing union work. They, the company, went through his employment record and in one year they actually showed that he had performed the duties that he was hired for, for only two days out of the entire year. The rest of the time he was on union business. They spent about twenty minutes going through the records and showing how all this union business was done. Paid for by the company and he'd worked only two days. When this was all done, Russell got up to object and says-- the labor commissioner says to Russel, "Truly, Russell, this is not right." He says, "You're right, your honor, this is not correct. I want the record to show that that first day they talked about, after two hours of work, I went home sick and worked no more of that shift. I want the record to reflect that really in that one-year time period I worked one day and two hours."

00:06:36

This was some of the mentality of the union and he was genuine about it and I heard about it from several sources. That was a bludger, and that was their attitude of high esteem in the union workplace. But at the end of the day many people asked me when you were there you brought around really significant changes and got the operation back to profitability. It wasn't just my efforts, but there was one thing that I believe made a real difference. It took about a year to find out, but I found out that the union leaders were unable to take continual pressure. In the past the union and the company would have these conflicts, they'd go out on strike, the company would give a concession, and then the company would work real hard to make up the lost ground so they could ship the lost ore and they would overlook all of these transgressions. So what I did was I kept continual pressure on the union leaders and it got so it was not a pleasant thing, because there were no breaks, no negotiations, and anytime they stepped out of line I was there to stop them, and we had the confrontation. They got tired. They got genuinely tired about being hauled up and confronted over all of these issues. We basically just wore them down by being tenacious and persistent and sticking to what had been agreed to. Eventually, the leadership all changed in--when I left the leadership had pretty much changed and people were willing to work on common issues. It was a long ways to go, but you could see some changes had been made. It just took management with a longer term perspective and you just had to be tenacious and give them no rest. That was my experience with Australia. I was glad to get out and go home.

00:08:40
Swent: How long were you there?

00:08:41
Schipke: I think two or three years.

00:08:45
Swent: [inaudible] It must have seemed longer.

00:08:48
Schipke: It seemed longer, and in the end we had quite a little conflict: they wanted me to stay on and I wanted to come out of there. They wanted me to stay on indefinitely and I didn't want to.

00:09:05
Swent: You were there from 1988 to before 1991.

00:09:08
Schipke: Yes, two and a half years. Every day was a struggle.

00:09:16
Swent: You went to the Whaleback Mine then?

00:09:19
Schipke: That was our main mine at Mount Newman Mining, but I ran the whole mining operation of producing the ore.

00:09:27
Swent: I bet you were glad to go home.

00:09:30
Schipke: I was glad to go home from that assignment. It was tough going and it's one I look back on and feel that I made very significant changes to that operation. But it was hard to make people change their behavior, respect one another, work together. These things all sound nice but it's a very difficult task to do.

00:09:54
Swent: Person-to-person.

00:09:56
Schipke: Yeah. So that was my Australian experience. I came back and managed the Navajo Mine, which was a bigger operation than San Juan. It was one of those dream operations: well-behaved union and many years in operation. A lot of people described it as a Swiss clock, but there were things that still needed to be addressed and fixed. I found it challenging.

00:10:30
Swent: I wish we had time, but I think maybe this is a good place to stop. We really do need to. We haven't gotten that or the Indonesian one, but that's another time.

00:10:44
Schipke: If you want to.

[Interview 2: May 9, 2003] [Minidisc 4]

00:00:00

Swent: Continuing the interview with Paul Schipke on May 9, 2003, and this time we've moved in to Lead [South Dakota]. Yesterday we had just finished your term of duty in Australia and then you went back briefly, no, not briefly, but for a short time, at the Navajo Mine.

00:03:32

Schipke: I guess that was two years ago.

00:03:37

Swent: And you were manager there. I'd love to talk in more detail about that, but I think you have to save that. But what did you gain from that stint there that you took on to Indonesia then?

00:03:53

Schipke: Basically [inaudible].

00:04:49

Swent: How many employees did you have there?

00:05:52

Schipke: [inaudible until about 00:05:44] There were very few questions about the reserve base. The biggest question that existed was in marketing coal. Coal had a very unusual characteristic in and of its kind. Most of the power plants around the world were not built for this kind of coal. This coal would have been perfect one to two hundred years earlier, as perfect as lump coal is in the fireplace when used for central heating. It would have been ideal coal to sell it as such--they had started out very, very small on a trial basis for various customers and eventually they were able to determine that the coal could be used in coal-fired power plants. This they had started to do on a small scale in Senakin and moved on to larger free trials-- And it was starting to [inaudible].

00:07:04

Swent: So this is coal again in Indonesia?

00:07:09

Schipke: This is coal.

00:07:11

Swent: Oh, I see. Okay.

00:07:12

Schipke: This was coal again, but it was a large operation. There were three mines that were open to development. There was a port under construction that could handle up to a hundred thousand-ton ships. A barging system was required for transportation. When I took over [inaudible].

00:12:29

Swent: We won't talk too much about the technicalities of coal mining, because I don't feel qualified even asking you about that, but--

00:12:57
Schipke: Then we'll concentrate on some of the--

00:13:00
Swent: Well, we should a little bit.

00:13:01
Schipke: Some of the cultural and some of the challenges of a foreign assignment.

00:13:06
Swent: Maybe let's just begin with that, then. You had some interesting things to say about the Navajo Mine. You were manager of the Navajo Mine for a couple of years--

00:13:17
Schipke: Yes.

00:13:19
Swent: Before you went to Indonesia.

00:13:21
Schipke: And the challenges there were primarily fine-tuning the--

00:13:25
Swent: Swiss watch, you called it.

00:13:28
Schipke: The Swiss watch, yes. It was a beautiful operation, well run. It was just a little bit of tweaking. Most of this tweaking was reinforcing some of the principles of the conduct of new staff members. It was to develop a long-term strategic plan for the operation and a vision. It really stretched the planning horizon of the staff, in getting cooperation with the various departments, the age-old problems that exist between maintenance and operation. Tackling these so it was more of a team effort than individual departments having skirmishes along the way.

00:14:14
Swent: Are you reporting directly to somebody in San Francisco, then?

00:14:18
Schipke: Actually we had three operations in New Mexico, and the vice president was located there in the vicinity.

00:14:33
Swent: The manager of one of three mines. And they were the Navajo and the--

00:14:39
Schipke: The La Plata Mine and the San Juan Mine. I operated the Navajo Mine, which produced about eight million tons a year.

00:14:51
Swent: And you said you had 400 employees?

00:14:54

Schipke: Approximately 400 employees. So a couple of years later Tim Winterer tapped me on the shoulder, wanted me to volunteer to go down to Indonesia and help bring along the Indonesian coal operations. Indonesian coal had been known for ten, fifteen years in the company and had been pretty much been proven up for coal resources. The one major problem holding back the development was a marketing issue: the coal was extremely hard, and most of the power plants that existed in Asia, which was the market, were designed for softer coals. Many of those felt they were unable to use as harder coal in their power plants. So it was a marketing issue and developing customers. That is essentially what a development group stationed in Indonesia had been working on for several years.

00:16:01

Swent: Was this quite different from the coal in Australia?

00:16:03

Schipke: Yes, most of the coal that BHP [BHP Billiton] had in Australia was coking coal. It was used for making steel. This coal was a steam coal used for generating electricity or for steam generation in large processing plants like pulp mills, paper mills, chemical plants, et cetera.

00:16:34

Swent: Why did this happen?

00:16:38

Schipke: Well, by the time I left, in five years, we were selling approximately 50 percent percent of our coal to Japan, Hong Kong, Malaysia, Thailand, Indonesia, and a little bit to Korea, and we sold some to the Taiwanese and even mainland China. Those things moved around. Hong Kong with probably about 15 percent, and Japan--those two countries were very stable with longer-term contracts and very reliable customers. The others changed on price and other coal source availability.

00:17:26

Swent: Were you replacing somebody when you went there?

00:17:28

Schipke: Yes, I went down to replace a person who really was not an operator; he had spent most of his entire career in the exploration field. He had taken on the challenge of breaking the market and developing a market for the coal, which he did very successfully. Now we were at the stage where we were going from small contract operations to larger mines. We had to build three mines, three independent mines, one port that was capable of handling hundred-thousand-ton ships, and we had to develop a reliable barge system of unique and specialized barges to transport the coal within Indonesia. From a technical standpoint, it got to be very complicated, and this was further compounded with the cultural differences of the workforce and business ethics of Indonesia. When I went down, there were about 4,000 employees and contractors working in building facilities and operating the mines on a smaller scale to maintain the markets that we did have. Immediately, when I arrived, we were over budget, behind schedule, and unable to do both the major construction activities and operate the existing mine. It was one of these projects where you had to hit the ground running and it was a long struggle, but

we ultimately went up from a little over a million tons up to the eight-million-tons-per-year design of the three mines and port.

00:19:14

Swent: Did you have any experience in the shipping?

00:19:17

Schipke: The shipping was something new to me. That was something that was new. My boss, Tim Winterer, he was quite knowledgeable and he said, "Paul, that will be the least of your problems." He knew what he was talking about, because the port was constructed, the shipping went like clockwork, and it was one of the areas that was never a problem. It was quite straightforward and really didn't create significant problems. We did run into a design flaw. They felt they could operate this port without a breakwater, and halfway through it became evident that for three months out of the year, we had serious wave action in our port, and we had to construct a breakwater. Otherwise, we were not able to get the tonnage out during these three-month periods.

00:20:14

Swent: Where were these mines and the port?

00:20:15

Schipke: The mines were located up in Kalimantan, which is the old island of Borneo. They were separated by distances of probably hundred miles apart. The coal was loaded onto barges and then barged down rivers and to the open sea to an island where we had a coal export terminal that handled the large ocean-going ships that took it to our customers.

00:20:47

Swent: So the barges were driven to just local, short routes?

00:20:53

Schipke: Yes, yes. The longest run was probably eighty miles, maybe a hundred miles. So they were for the short runs, and they hauled it from the mines to the export port. The barges that were used were a unique design that were self-unloading barges that were designed by the BHP transport system that was first of its kind in the world. The design was very good. They were built in mainland China, near WuXi, in shipyards. The quality of construction was very poor. Contract administration was very difficult. I went over there once because the Chinese had decided that they were going to no longer honor the contract and build any more barges, because someone else came in and offered them more money for the spot in the shipyard. So they were basically just walking away from the contract. We had to go over there and get quite forceful with the shipyards that were building it, which was a state enterprise. It was very interesting, but we were successful. The last barge out of eight, we ended up bringing back barebones and we really had to outfit ourselves, because even though they said they were honoring a contract, nothing was happening, and we were forced to do that to meet our production schedules.

00:22:26

These were the type of challenges that were really difficult; it was the cultural and business ethics of the Asian people. Significant difference in all the countries. Corruption is very real and alive in all those countries, and the real impediment to American-based corporations.

00:22:58

Swent: How did this manifest itself in Indonesia?

00:23:05

Schipke: In many, many forms, very direct, some threatening, some very, very subtle. One of my staff members and I sat down and said, "We'll write a book about all the forms of corruption that occurs here." We had forty-five ways that it does occur, and we quit counting after that. But there's many different ways that it happens. Some of it is very subtle, some of it is very, very direct. Simple things of not being able to get tax refunds that's mandated by law because there's no facilitating payment. You can end up with millions of dollars that's not being paid to you that's due. We had difficulty because we had a mine manager that was going to get arrested and get jailed because he didn't have a police clearance certificate, a very minor, minor infraction. Tremendous amount of pressure was put on us to make facilitating payments very, very small to both the police and the equivalent of the labor department at the regional level. This we refused to do, and eventually they backed down. I sent this mine manager over to visit our neighbors which was a Korean outfit. They were extremely open about how they handled this issue. They gave us a list of, I believe it was nineteen government officials at the regional level that they were paying off. They gave us the exact amount that they paid them every month. They wanted us to know this so that we would not pay them too much or add anybody else to the list. It was a very systemized approach and they had no problems with anything. Once a year they sat down with these people and reviewed what services had been performed for the year, and there were adjustments to what would be paid for the following year. Very systemized how it was handled by the Koreans, and that is why they could not understand why a foreign company like the Koreans could be so different than the foreign company of like other Americans, because the Indonesian company was a subsidiary of BHP, a Delaware-based American company.

00:25:37

There were many different ways that this was done. It was at many levels. The taxes were usually at a national level. There was no recourse through the courts, and on the local levels we had difficulty with local residents who said they owned the land; there were no records of this, but they owned the land and they wanted to be compensated big money. We were willing to pay reasonable amounts, but not big money, so they put barricades across our haul road and shut down our operations. The police and the local military refused to come in and intercede because they had not received money. These were very straightforward.

00:26:25

Swent: What do you do in a case like that?

00:26:25

Schipke: Well, we had to go to a higher level. I think we went back to Jakarta, the national level, and told them the problem, and they very begrudgingly went out and dealt with the people and told them what they were doing was illegal, but very begrudgingly, and there was no doubt that later we found that they had encouraged the local people to do this, to put pressure on us so they could get payment also. Both of them, in the end, would get payment and come out ahead. These are some of the kinds of issues that I dealt with every day.

The other issue that was very disturbing to me was that your own employees often were involved in all these schemes; your own employees would steal from you. We had a tremendous problem with theft of diesel fuel at our operations. We started investigating this in detail and we found out that there was a tremendous amount of employees involved. I was very suspicious because when we had openings for fuel handlers, there'd be a hundred people would apply for it. It was one of the lower level jobs at the mine, and that was disturbing to me. We soon found out why, because all of them were able to retire within six months because they were selling fuel on the side, they were selling it by the barge loads. It was very, very difficult. Even the people delivering the fuel were siphoning off the fuel. Some places they were even taking the fuel and substituting kerosene in its place, because kerosene is much cheaper. These barges were being stopped in the open sea and these kinds of substitutions were being made. Tremendous, tremendous theft going on and very, very difficult to guard against all of this. It really came down to how much you were going to tolerate.

00:28:31
Swent: I was just going to say "why bother?"

00:28:33
Schipke: Some of it got to be very large amounts of money. You had to do this, and your own employees were often involved, and a lot of people could lose their jobs because of it. But they didn't care because they could make enough money in a few months to offset their wages for a few years, so they were willing to take the chances.

00:28:58
Swent: So how did you handle the list of the nineteen people that needed to be paid off?

00:29:03
Schipke: We just--

00:29:05
Swent: Did you pay them?

00:29:07
Schipke: No, we paid no one. We never did.

00:29:08
Swent: Why not?

00:29:11
Schipke: Because there's a Foreign Corrupt Policies Act [Foreign Corrupt Practices Act] here in the U.S., 1977, that makes it very clear for what the penalties are of such. It made it very, very difficult for--

00:29:21
Swent: Management decision.

00:29:22
Schipke: No, there were other firms, American firms, included that we went and studied how they handled similar issues, and how they got their tax rebates back. Went back and made decisions that those companies' methods were not ethical and did not comply with the spirit of the law.

00:29:43

Swent: How were these tax rebates?

00:29:45

Schipke: Well, over there they have for every transaction a 20 percent value-added tax. And if you're exporting a product out of the country, you got that 20 percent back. So we went out and spent a dollar for a gallon of fuel; when you exported your coal and showed the revenue coming into the country, you got twenty cents back out of that dollar.

00:30:11

Swent: Supposed to.

00:30:12

Schipke: Supposed to. It just was a matter for those guys to write you a check. The mechanisms were set up, it was all clearly understood, but you'd go in and see him and they didn't like the check. They had invoices you forgot to cross your "t," and instead of putting a dot, you put a comma. The invoices didn't have your full name, it had a portion of your name. Just any possible thing they could think of to say, "We're not going to pay your receipt because of it." But other companies, other American companies, we went and studied how they were doing it, and it was very clear what they were doing was not ethical, and I would not allow it. When I left we had millions of dollars still at risk, but they basically were using an intermediate, and they had slush funds that nobody questioned very closely, and that's how it was done. So it was very interesting as how those companies handled issues of corruption that were basically in violation of the U.S. laws in that country. And then you dealt with other businesses, like the Koreans, and it's a way of life for them. They were very quick, very agile to make it just a normal cost of doing business.

00:31:44

Indonesia was challenging really being able to conduct business. Here we take it for granted that you can conduct business. Over there being able to conduct business the first question you've got to ask yourself--there are many days when I said we should never have thought we were smart enough to conduct business in Indonesia. The second thing that was easier to manage to me was the cultural difference: 90 percent of my workforce was made up of Muslims and also was made up of ethnic groups from all over Indonesia. The conflict between the Muslims and the Christians was always there. They were trying to get their people of their faith hired into the company, and you had to honor both. The ethnic problems that did develop were always under the surface and you had to be very sensitive to them. I felt fortunate that I had spent time with the Navajo and the Ute Mountain Indians in New Mexico, and I had spent time in Australia, so I had developed this sensitivity to some of these issues and tried to develop that in the staff. Some of these issues were moral issues. It's not what you do during your eight hours at work, or ten hours at work, it is also how you live your life. Your moral behavior is extremely critical, extremely critical.

00:33:32

Swent: How did this evidence itself?

00:33:34

Schipke: Well, there were--drinking alcohol was a real problem, and I was made sure to be seen [?] that maybe one beer could be tolerated by my staff. If you ever drank heavily there

were always complaints about it, and my successor to the operation, I warned him repeatedly about this, and he ignored it. When I went down on a consultation visit six months later, the whole staff was almost in mutiny against him because of his drinking and excessive spending of money for personal benefits. The drinking; the other one was women. It was very easy to have contract wives which you would basically "marry" somebody for six months. At the end of six months she would go back to her village or whatever. That was a real issue with many of the Indonesians, because that was viewed as just a glorified form of prostitution. Down there, culturally, it was accepted but the way it was being handled by foreign workers, it was more of just a glorified form of prostitution and that was not well received. There were various members of my staff that I had to terminate their employment because I told them that their conduct off the job is part of their job in Indonesia.

00:35:14
Swent: Were these Americans?

00:35:17
Schipke: Yes, I had Americans, but primarily I had Australians, so there were a lot of Australians also.

00:35:25
Swent: But was the staff mainly Indonesian?

00:35:30
Schipke: The staff would have been probably--probably 90 percent of the staff would have been Indonesian, but 10 percent, all of the key positions, whether it was engineering or even human resources, all of these were head up by expatriates. The skills were not available in Indonesia. They had no mining history, and no large scale mining history. They did not teach it even though they had schools for mining. You'd hire people with an engineering degree that had never seen a bulldozer. So even though they had paper degrees, which was very important to them and very hard to come by, from a technical standpoint it was not very beneficial on the job. The training programs were enormous, and on the technical side and on the management side. Their ways of management that are quite different. An example was corruption: you go to your staff and ask how to handle a problem. It was very simple; they found out who you're supposed to pay and how much. "We can't do it that way." "Well then, what else can we do?" They shrugged their shoulders and said, "I don't know." The key positions were foreign workers, primarily Australian, a few Americans, and I had one or two Canadians that also worked.

00:37:06
Swent: When the arrangement was looked at, you had to have permits from the national governments?

00:37:16
Schipke: Yes, that's correct.

00:37:17
Swent: Was there any sort of stipulation?

00:37:18

Schipke: Over time we were supposed to reduce it down and have them replaced by Indonesians. Very onerous requirements, and the high-level positions were where the problems were. The hourly people were excellent workers and outstanding safety records, very dedicated, hardworking people. It was just a matter of teaching them skills, and teaching them how to do things and then they'd follow it. It took a long time to have them bring forward ideas, new changes, because they were always so repressed. You do what the boss says, you don't give them an idea of a better way to do it. That kind of nurturing took time. I saw that process by the end of my five-year term, now. We had people that were getting to be quite outspoken, good ideas, good suggestions, good contributions, which was what really needed, because their ideas were coming from that culture. As I found out over my working career, the best ideas usually come from your workers if you listen to them. The training was a real challenge.

00:38:35

One of the things that was very successful--it was an exchange program. It really was taking a superintendent of a coal preparation from one of my mines in Indonesia, having him go and work at a similar plant in Australia to see how their work processes were, how they did their maintenance, how they handled their crews, how they did their planning and budgeting. These things were very, very beneficial. These were usually for three-month period, a two- to three-month period. When people came back, they all said the light came on, they really see what we were trying to teach them, and they really contributed after that. That was something that was a real challenge.

00:39:28

Swent: Is this something you initiated?

00:39:30

Schipke: Actually we had a brainstorming session, you know, with my staff. We said, "How are we going to accelerate? We have to accelerate the transfer, plus the management, to our staff. How are we going to do this?" We kind of locked ourselves away and then it really was my staff the put the idea out and put some flesh on it so we were able to follow through with it. It was really my staff.

00:39:56

Swent: And you could do it within the company, which was--

00:39:59

Schipke: We were able to do it in the company. The cost of it was something that was really making people nervous, because at this time, we were barely making our profitability figures, so training was a big cost to us. But I saw no other way to hold the business together without this.

00:40:20

Swent: Were the people in Australia welcoming?

00:40:23

Schipke: At first there was resistance, because you had some cultural differences, but in the end they were quite supportive of it. We were very, very selective in which mines they went to and which people they were assigned to. We had a screening process as to where they went, and we made a very clear direction as to what was expected to be accomplished

during their stay there. So that selection was probably as critical as the selection of the employees that benefited in this training program. New Mexico was my favorite whenever we could do that because people were very sensitized to working in a different culture. People that thought differently and had different values. So Navajo Mine, San Juan Mine, La Plata Mine, these three dealt with the Native Americans and they were excellent places to send people because you had a very supportive management and an understanding management.

00:41:25
Swent: There's been a lot of criticism of American firms overseas for their environmental practices. Would you like to discuss that?

00:41:43
Schipke: Well, yes. This is probably a major, one of the first problems I saw when I got there, and that was that the mine plans that had been developed basically were designed such that the long-term reclamation of the pits was not addressed. They basically said that the economic limit might change over time, so we should not back fill our pits. With a hundred inches of rain, and acid-forming material, it was creating a real environmental problem. I addressed this issue head-on, had all the mine plans changed. It reduced the overall profitability expectations, but it eliminated a long-term problem. Yes, our people had put forward unacceptable environmental plans in the big picture and they had been acceptable to the Indonesians mainly because they did not have the expertise to understand, because they did not have a mining industry to see what the long-term implications were. A lot of the smaller stuff, the safety gear to protect the employees, that was equivalent standards. Handling the water, the final reclamation, which was where all the big money was, these things were not handled well. There are some operations, like Freeport Minerals. That operation cannot exist without putting the tailings into the river and creating fairly significant ecological changes. Whether these will be long-term I really don't know, but I do know that our approach in the beginning was not acceptable.

00:43:38
Swent: To whom?

00:43:40
Schipke: Well, they were not acceptable to me, and they were not acceptable to the top management of BHP once they understood the issues. They were quite supportive of the changes.

00:43:53
Swent: But the Indonesians hadn't?

00:43:55
Schipke: The local people complained about the water certain times of the year. They could not use it for bathing and drinking like they had in the past, so it was a known issue with the local people that resided around the mines. But at a regional or state level and a national level, we were exemplary in our conduct. It wasn't just us; I went to other operations, and they had pretty much shortchanged the long-term implications of their operations. It's easy to understand to some degree, because you go into these things and it's just such a struggle to just live day-to-day, get your coal out on schedule. These things were

just very difficult in the work environment and the business environment over there. Well--

00:45:00
Swent: You were there for five years.

00:45:04
Schipke: And in the end I wore out. [chuckles] The business was just very, very demanding and some things concerning the corruption, it was a neverending fight. As soon as you had convinced one governmental official that he had to conduct himself differently, and he accepted that and could live with that, he was transferred out. We had to start all over with somebody that demanded money and work your way back up. It was a tiring process and not very rewarding at all. But Indonesia, I mean, at the end of the day I was rewarded in seeing very successful mines going. When we left, we were down to about 2,000 employees that were making an excellent livelihood, whereas before really there was very little for them to be looking forward to. We were making contributions to the overall economy of Indonesia. They were gaining the technological knowledge to be able to run their own operations. I could see a lot of benefits from the struggle. I was convinced that the profitability of these operations were going to be there. It was always going to be difficult.

00:46:41
Swent: Where were you living?

00:46:46
Schipke: I was living in a city called Balikpapan, which was near the operation, still some distance removed because the operations were quite remote in the jungle.

00:46:58
Swent: Your family was with you?

00:47:01
Schipke: The family lived with me because when I arrived there both the foreign workers and the top-level Indonesians were living in Jakarta, of thirteen million people, and they would fly out to these sites to so-called conduct business where they were on a fly-in and fly-out schedule. Consequently they did not own the problems of the operation and they never integrated into the community. A major change cost me employees where I relocated Indonesians where they lived near the sites in small villages and small cities that were quite primitive and basically the foreign workers had to live in Balikpapan because there were schools for the expatriates. They were able to support their families, but I knew people in--

00:47:57
Swent: Was this a decision that you made on your own?

00:47:59
Schipke: This was a decision that I made that was supported by my bosses that was heavily fought by both the Indonesians and the current expatriates. At the end of the day, I lost a third of them, but when we were done, I was convinced that it was the right decision because then we became part of the right community. We started solving the problem that all of our employees were having, and it had a tremendous difference. You have to

own the community that you do business in, and if you don't live in those communities, it's very difficult for you ever to really be accepted to expect to have a long-term livelihood there because it was the local residents that were causing us the most trouble at the end of the day. And it was the most difficult to deal with. They all wanted a little bit of money, and we were a source of money.

00:48:52
Swent: What sort of situation was it for you down there? How old were your children?

00:48:58
Schipke: My children were under the eighth grade. Basically the situation was that they had an excellent, outstanding expatriate school there that went from kindergarten through eighth grade. They had expatriate teachers there. School was taught in English although the student makeup was like from twenty-five different countries, all English-speaking, so it was quite, very international. Probably about a third of them were Australian and the other two-thirds were from all over the world. My daughter, who was from second grade--they were doing computer designs, doing things on computers, they all had their own computers. It was just unbelievable the funding that was available and what they were learning, probably better than the schools here, more advanced. The library system--

00:49:56
Swent: Who supported it?

00:49:59
Schipke: The large companies, and they charged very healthy fees, so it was self-funding. So the companies, through their employees, had to pay very large fees to go to this school. It was basically self-funding. Library systems were completely computerized, the entire system for an eighth grade school. Some of it was pretty impressive. They had tremendous plays and interaction. Lot of volunteer help from the mothers, of course. So the facilities were no problem. The shopping and the amenities people expected in life, no, it wasn't like that at all. Once you left the living areas and went downtown, it was very Indonesian, no supermarkets to speak of.

00:50:52
Swent: What sort of house did you have?

00:50:55
Schipke: We had a concrete house of probably about--I think it was a three-bedroom house, probably about 2,000 or 2,500 square feet.

00:51:08
Swent: Was it in some sort of compound?

00:51:11
Schipke: It was in a compound.

00:51:13
Swent: All expatriates?

00:51:13

Schipke: All expatriates. Everybody had a maid that worked at their house, and part-time gardener. And down there everybody had a driver, mainly for the liability, because if you were involved in an accident in Indonesia, you were as responsible as if you had shot somebody with a gun. You do not want to be involved in a fatality when you're driving down there. It's got some really bad consequences. We basically drove not [did not drive?] from the safety standpoint, but from the personal liability standpoint of a serious accident.

00:51:50

Swent: How did you get out to the mine, then?

00:51:52

Schipke: We basically went to the mines by either--we had a small, fixed-wing plane that would go into two of the mine sites. It would go into one mine site and the port, and then you'd have to go to the other mine site by boat. We had a helicopter that we had under charter that would take us directly to three of the mine sites. One of the mine sites you could drive to, but it was about three and a half hours.

00:52:24

Swent: Would you just come back to town on weekends?

00:52:27

Schipke: A lot of my activity, because I ran all the mines in the port, was not necessarily at the mines. It was more with Jakarta, the regional governments, reviews of business plans or back with the Australia, or wherever, and the market. I had to spend a lot of time in the marketing. Probably six weeks a year I spent on the road with our marketing people with customers because that was always a very critical part of the business. So I lived there and would fly to the mines, spend a couple of days, and then come back. It was a lot of time in the air.

00:53:14

Swent: And your marketing covered the whole Pacific Rim?

00:53:14

Schipke: Pretty much.

00:53:16

Swent: The Western Rim, anyway.

00:53:18

Schipke: Yes, pretty much. With the people in Asia, they like it. Not the legal aspects. They like to have a handshake, understanding, they like the dinners with the people that's really making the decisions. They want a real relationship. So I'd go out. I'd set out 'x' amount of time every year, have my marketing people take me out to the key customers to establish or maintain that relationship. It was well appreciated, and I think it was key reason why I think we were able to expand our market and sell all our production.

00:53:58

Swent: Is the mine still going?

00:54:00
Schipke: The mines are still going; they've had difficulty, they've had to sell to our Indonesian partner a lot of the interest in the mine, so they're down to 50 percent ownership now.

00:54:19
Swent: You did have to have an Indonesian partner?

00:54:21
Schipke: It was required. Over a period of time you were expected to keep reducing your interest so that at the end of, I think it was, ten years of operation, you were supposed to be down to 49 percent interest in the business. In the beginning I was under the obligation to do that. No Indonesian entity wanted to buy it. I couldn't sell it. BHP had to do that, and I think they also got tired of the hassles of running a business proper, and they basically contracted a lot of the services out including the mining itself, because it was just too difficult. I felt that was a fatal blow to the business because without being able to control the mining operations, there's no end to these problems. There was no end to these problems. It's fair to say that I've been quite disappointed with where the operation went after I left. It was very short-term thinking, and there was no longer a longer range vision of developing the people and developing the other properties that we had in Indonesia that were much, much, much more economically attractive. But they are still operating. I heard there's all kinds of problems, but I've heard they're kind of self-imposed.

00:55:50
Swent: I'm working under a handicap here because I didn't fully prepare, but there's been a lot of litigation about Kalimantan, but I'm not sure if it's this mine or another one. A big secret involving a--

00:56:11
Schipke: You're probably thinking of the gold, there was a big fraud that was perpetuated.

00:56:17
Swent: Was that Bre-X?

00:56:19
Schipke: Bre-X. That happened, that was in Kalimantan. That was a golden scam, a fraud.

00:56:29
Swent: Just a pure scam, wasn't it?

00:56:31
Schipke: It was pure scam.

00:56:33
Swent: Was that happening when you were there?

00:56:34
Schipke: Oh yes, it was. Our people kind of got excited and wanted to get involved in it. We stayed clear. I actually knew a couple of the players in it, but it was a scam from day one. One of the most controversial things was the geologist that was probably responsible and knew the most about it, was a Filipino.

00:56:53

Swent: Had a Spanish name.

00:56:55

Schipke: I can't remember it either, but he basically fell out of a helicopter, very, very suspicious circumstances that the local noise on that was that he was pushed. It was quite a scam, whole books written on that one.

00:57:19

Swent: Right, but BHP wasn't involved.

00:57:28

Schipke: No, no. We stayed clear when they got kind of excited about it and our people. The other thing that we didn't like about it was also that Suharto's family also wanted to get control of that. They wanted to get big interest in it. They were out there, fighting amongst themselves, the family was, as to who got a share of this Bre-X. It really exposed their involvement in corruption at a very high level. We stayed clear of it, and I've always been thankful that we were successful in doing that.

00:58:12

Swent: Did it make any difference to you, or what sort of difference did it make, when Utah became part of GE or a part of BHP?

00:58:24

Schipke: My career?

00:58:27

Swent: Right. Did you feel anything?

00:58:32

Schipke: I probably wasn't at a high enough level with GE. I did go to several GE management meetings and met a lot of the people in GE, and it definitely was very noticeable to me the cultural differences in how you approach and had to run a business and how you thought. They were much more short-term, more manage-the-numbers-type business, while in mining it was longer-term and you lived with variations. They managed their numbers to make sure that we had continual growth, very difficult to do that with mining and the commodity prices that you're subjected to. BHP, that was more exposure to that, and I was in Escondida at the time when that all took place. Well, I ended up at the Newman operation. Again, there was quite a bit of cultural differences: they were a very regimented, bureaucratic company. It was hard for me to kind of function in there, and it was very large. Utah was small, you were able to speak your mind. You put a budget together, the budget was your best estimate, good or bad. That's why it was approved. BHP you put a budget together knowing there was going to be four cuts. The first part of the budgeting process was to try to inflate this 40 percent or should I try to inflate it 25 percent. What's your strategy going to be to get me most of what I think we need to stay in business.

01:00:19

These kinds of things I found very difficult for me and frustrating. Ethics of BHP, that was never an issue. Ethics, conduct, but it was just very bureaucratic and a lot of game playing at the high levels in the company which was very distressing. I was looking forward to Jim Curry heading up the mineral division in a bigger way, having a bigger

impact, because it was obvious. They were very much introverted with just Australia; they did not have a global perspective of the world and things outside of it. That was one thing that I saw that was going to come out of the merger with BHP.

01:01:23
Swent: Were you right?

01:01:26
Schipke: Well, yeah, the bureaucracy takes a long time to change that. Jim Curry would have been a good mix. They brought in Anderson afterwards, and he was an American, and he was oil and gas and a completely different philosophy of business. He eventually merged with Billiton. It was not a comfortable cultural environment to work in, corporately, within BHP. Too many decisions were made politically and not based on pure business reasons, and that was bothersome to me. Also at that time, the CEO was pushing growth at all cost, and that was a reason why he was really supportive of Indonesia. He wanted growth, he wanted to show that we were able to grow and expand outside of Australia. Some of the projects that were going forward were ridiculous. He had a steel operation, and they couldn't even show a profit. In my case we were struggling over whether our profit should be 12, 15, 20 percent return on equity, and he was just trying to break even. There was a lot of businesses that were pushed that just never made sense, but, hey, we can say we had a steel operation in Indonesia, and those things are very difficult to see how that was going to ever pan out. Eventually that all collapsed and there was a lot of shutdown and sell-off of these types of activities.

01:03:12
Swent: What led to your leaving then?

01:03:17
Schipke: Five years in Indonesia; I told them I was ready to move on. They really didn't have anything challenging for me, that I was wanting to go to. It was because they were going through this consolidation period, and I was having a really difficult time understanding where we were going to go as a company because of this high level infighting. I just said, "I had enough," and basically when I left, I just closed the door and said, "That's the end of my mining career and I'm going to do something else with my life." And I stepped out and did that, and that's why I'm here. I did go back more as a favor than anything else and did a little consulting for BHP and in Australia, but pretty much knew by then that I was done. I was done with my mining career. The challenges that I wanted were not there--Australia, I didn't want to go back there and fight the unions; there was too much of that going on. I didn't want to fight the corporate bureaucracy that existed within BHP.

01:04:32
Swent: Indonesia was not attractive to you?

01:04:37
Schipke: They wore me out. Five years of the corruption, I just said, "You know, I can't do this, it's just too hard." Also my children were getting to the age where they would have had to go to--

01:04:48
Swent: To boarding school.

01:04:49

Schipke: They would have had to go to boarding school. They were within a year or two of that, so there were plenty of challenges in Indonesia, but I was quite worn out from that and what was left in BHP was not very attractive. I wanted to get out while I had a few things to do, something else with myself and that's what I decided to do.

01:05:09

Swent: When did you start building your home here, then?

01:05:11

Schipke: The year after I left BHP. I actually, technically, left BHP on a leave of absence for a year. I said, "Okay, if you don't have anything now, give me a leave of absence for a year and I'll come back and check with you a year later." I went back and checked a year later and really didn't have anything, so then I took an early retirement package. I started building on the house during that interim period. I'd had this land for fifteen, twenty years. Really what it comes down to is that one thing that I did get out of my mining career was the ability to analyze businesses and not be disillusioned with a lot of rhetoric. It has served me well in my personal life, and my personal investments in the stock market. More importantly though, I developed the confidence that my investment decisions that I was quite comfortable that I could survive in the stock market as a source of income for the remainder of my life here. So far I've been able to do that, and I'm very indebted to various mentors, companies, and the industry along the way that taught this to me.

01:06:19

Swent: You might repeat the little anecdote you told me about earlier about Bud Wilson's advice. I like that.

01:06:27

Schipke: Bud, Bud Wilson, the last time I saw him he came and addressed some of the--

01:06:33

Swent: We should identify him.

01:06:34

Schipke: Bud Wilson was CEO of Utah at the time of the major acquisition with BHP. The last time, which was probably within about six months before he retired, he came and addressed a training session of young managers. At that meeting he reflected back on his career in mining. He made it very clear to all of us that one of the most critical factors of success was a supportive wife, a wife that was willing to travel all around the world, a wife that was willing to support you, and a wife who is willing to get involved and support you in the communities where you resided. Bud said this is one person who never gets properly recognized in any corporation, but he says you owe a lot to your wife, and he felt this way about his wife also.

01:07:43

Swent: That's something that you don't hear very often brought up, actually.

01:07:51

Schipke: My wife had to learn a lot of languages, a lot of cultures, and she hosted a lot of visitors and a lot of functions. She got involved in a lot of community activities to help the needy, tremendously active person and you had very little choice in many of these

locations. Because of your position, you were unable to take a backseat and do your own thing, you had to become very active. What Bud said was very, very true and very pertinent and it is still pertinent to this day.

01:08:33
Swent: How have your children adjusted to Two-Bit Gulch after being in Indonesia?

01:08:42
Schipke In the beginning, academically they were probably equal to or better than what they came back to. From an academic standpoint they were quite well-adjusted. Probably more the mentality of every student and every family who have grown up, and plan to live, and plan to die in these small communities. It is probably a bit more difficult to them to deal with that, and people that have really have no interest in where they've been and what they've seen. Probably to some extent, they are often more aggressive here than what they were used to over in Indonesia, much--less forceful in confronting people. Here you are much more forceful in confronting people. These kinds of mannerisms probably changed more than anything else, that they weren't used to dealing with, you know. Academically, it wasn't a problem. They've still maintained a very broad perspective of cultures and world affairs.

01:09:57
Swent: I'm sure they are more cosmopolitan than most of their classmates.

01:09:59
Schipke: Yes, yes, that's true. But, the smaller community, I think we've all fallen in love and have no real regrets.

01:10:10
Swent: And you've taken up skiing?

01:10:12
Schipke: Oh, they've done all those things, yeah. We're all quite happy with our lifestyle changes, and basically I consider complete control over my life and what I want to do for the rest of my life, and I'm quite happy.

01:10:24
Swent: Obviously you are. That's wonderful.

01:10:31
Schipke: So, the mining industry has been very, very good to me, and it is more than just financially. It's been rewarding from leading and being able to get the personal satisfaction of overcoming major challenges, cultural awareness and understanding of other religions, other culture, and being able to understand businesses, and being able to analyze those that have been financially rewarding to me also.

01:11:10
Swent: You've had a wonderfully varied career, worked for some great mines. Homestake and Escondida.

01:11:26

Schipke: BHP has--there has been some good mines and a lot of good people along the way. You could spend a lot of time talking about who has really made an impact in your life. There have been a lot of people that have influenced me.

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Swent: Is that a good place to stop?

01:11:42

Schipke: I think we should stop there.

[Interview 3: September 12, 2003] [Minidisc 5]

00:00:00

Swent: This is September 12, 2003. I'm interviewing Paul Schipke, continuing an interview we started a few months ago. We're in Lead, South Dakota, at the Golden Hills Inn. Paul had planned to go elk hunting, but that got canceled. It's a beautiful, beautiful day. When we interviewed before we didn't talk anything about the coal mining, and we didn't get into the environmental aspects of his career, and we didn't discuss the--because it was part of the coal mining story--we didn't get into the relations with the Native Americans. Let's start in just a quick recap: you were hired by Utah International and working out in their San Francisco office. You went there in 1972, and 1970 was the Environmental Protection Act, I think--

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Schipke: I was hired by J. Leroy Balzer. He had been appointed in San Francisco at a corporate level reporting directly to the CEO, Bud Wilson. Leroy was given an unlimited budget reporting to the CEO, and he was charged with helping bring the mining operations in the U.S. up to compliance and providing really the strategies and the guidelines to deal with the environmental movement, per se, for future operations. J. Leroy Balzer really was an academic. He had a Ph.D. and trained primarily in industrial hygiene issues and specialized in asbestos and cancer. It turned out that it probably was a little bit of a poor fit, because most of our issues dealt with mine-land reclamations in the uranium operations, and Wyoming dealt with cleaning up waste waters for radioactive isotopes. Leroy organized a small staff and quickly realized that he wanted somebody that was able to communicate technically with the mines, and he hired a mining engineer which was myself. I basically started on the ground floor in San Francisco with the environmental department that was organized by Bud Wilson in response to the NEPA Act and a lot of protests by, led primarily by the Sierra Club at that time. It was a very interesting time because Leroy really wasn't sure where the environmental movement was going.

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What was really required--most of the environmentalists at that time, their tactics were to stop current operations or prevent the startup of new operations in the U.S., and it was a very adversarial relationship, it was very much a media-played strategy by Sierra Club. They were out to get whatever they could in the public's eye. That was their tactic to stop this.

00:04:08

Swent: Where were they doing this?

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Schipke: They were organizing at some of the state levels. Any new project they would organize people to actually protest at the mine sites that were being proposed to be developed. We even had threats in San Francisco at our corporate office. There were concerns about physical threats primarily to our computer systems and data processing activities in our headquarter building. We had to install security measures there. It was quite different than it was today. The technical aspects of the environmental issues were not really understood by people on either side. That was what really came to light. People just didn't understand that there was damages being caused that could have long-term effects. Nobody really understood how best to go about fixing these situations. We go

out to the uranium mines, and I can remember discussions where we weren't even sure what the measurements of radioactive exposure were and how to measure those things. Even if we did have an idea of how to measure, a lot of times the lab analysis and the technology wasn't available to measure it at the levels that were being detected. At this time also, NEPA, EPA was still putting out guidelines as to what they felt was hazardous. It was a very unsettled period of time that I fell into, and in the beginning we spent a lot of time running around identifying issues in the mine that we weren't really solving any issues. I was asked to transfer down to the Navajo Mine, because they--

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Swent: And where is the Navajo Mine?

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Schipke: The Navajo mine is in Farmington, New Mexico, on the Navajo Indian reservation. They had something like 3,600 acres of land that had been disturbed by mining, but never really reclaimed.

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Swent: This was coal mining?

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Schipke: This was coal mining, and people would call it "strip mining" because there were large areas disturbed by dragline operations primarily to uncover the coal from which was in mine. There was a lot of acreage that was left completely untouched.

00:07:17
Swent: Untouched by?

00:07:19
Schipke: Untouched for reclaiming it and revegetating it. Some of this acreage was required for disposal of ash from the power plant, and the consumption and the burning the coal produced ash that had to be disposed of. We're talking in the order of two to four thousand tons a day. So this was being hauled back and placed in the mine and covered up.

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Swent: Was radioactivity a question here?

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Schipke: Radioactivity was never a question in coal operations. That was never really a question, and down in New Mexico, where the average rainfall is down around seven inches a year, really there weren't any large water issues like mine acid drainage or anything like this.

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Swent: So was it strictly air?

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Schipke: The biggest issues were reclaiming the land to a useful purpose. It was interesting because the leases, when they were signed with the Navajo Nation under the direction of the Bureau of Indian Affairs and the Department of the Interior, it was quite clear in reading the lease terms that they were expecting a very minimal amount of reclamation.

It had prescribed that we would really just knock off the tips of the high peaks that were left from the mining operation and throw a little seed on the ground. It was quite clear that the royalty was expected to be compensation for this disturbance to the land. In reading the lease regulations, I think all the parties involved didn't anticipate a large reclamation issue.

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Swent: Who were the parties involved?

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Schipke: Well, the Navajo Nation, (the Navajo Indian tribe), the Bureau of Indian Affairs and they were provided direction by the Department of Interior, then, of course, the mining company. In this case, because the power plant was also located on the reservation, there were some agreements with respect to reimbursement for reclamation between the power company and the mining company, Utah International.

00:09:47
Swent: Utah International was the mining company. Who was the power company?

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Schipke: It was a consortium of about six different companies. Arizona Public Service, out of Phoenix, Arizona was the manager of the power plant who primarily spoke for the consortium and who we dealt with on these issues.

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Swent: Then there would be a representative from the BIA?

00:10:11
Schipke: In the early terms of the leases, and after the leases were signed, it was more of just a monitoring role that they had to see that both parties were living up to the terms of the lease that had been agreed to or approved.

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Swent: But Utah was leasing the land directly from the Navajo Nation?

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Schipke: Yes, but of course the Navajo Nation, before it could enter into that lease, it had to also be approved by the Bureau of Indian Affairs of the Department of the Interior. Now there's some controversy as to whether the royalty was adequate that was agreed to at that time. At that time, because of the poor grade coal, everybody, the power company, the mining company, they all felt that they had to pay a premium for these leases because of the poor quality of the coal. On an equal valuation basis what was being paid was really, I think, 25 percent higher than the nominal rate, or the average rate that was paid in the industry. All of these things change over time, and that's what happened in the reclamation area. The new legislation that was being conceived was much more stringent than this.

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Swent: This is federal legislation?

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Schipke: Federal legislation. At this time the state of New Mexico had no legislation. As they were being threatened that the federal legislation would take over if there was no program in place, the state of New Mexico went out and promulgated regulation that applied to the surface coal mining. These regulations were put together at a time when there was no really clear guidance as what was needed, what would work, et cetera. We, as a company, were supporting the state to go ahead and implement more definitive legislation so that we knew what the rules of the game were going to be. This was basically done and when I transferred down to New Mexico we were faced with new state regulations. The new state regulations, really I don't think any of the parties really, fully understood what the long-term implications were. We had no feel for technically whether these things would work because the regulations basically said you had to return the land to a useful state that was equal to or better than it was prior to the mining.

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Swent: Equal or better?

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Schipke: Equal or better.

00:13:13

Swent: Ooh!

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Schipke: And then they went the next time, and they told you how to do this: you had to save topsoil, you should possibly consider irrigation, you had to plant only native species. So not only did they tell you what the end result was, then they also started prescribing how best to do this, and at that time what would work and what wouldn't work.

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Swent: What had the land been used for before?

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Schipke: It had all been entirely used for the grazing of sheep, primarily. It had been surveyed by the government, prior to the mining operation, as a potential for an irrigation project. So we had some very good historical data prior to mining. It also showed that some portions of our lease, probably about a fourth of our lease, were badlands. They listed it as badlands which basically was it was unsuitable for even grazing. I remember them talking that it took three hundred acres to support one sheep. Then we got into what needed to be done, what should be done, and we had to submit a mining permit. I distinctly remember being put on the spot to provide the guidance.

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There were two different things outside of the normal regrading that we knew we had to do for stabilization. It also was whether we would irrigate and apply topsoil. Both were very costly. There were questions by top Utah management as what would be successful. They came down to me and said it was my decision--here I was a year or two out of school--as to whether we would irrigate or whether we would apply topsoil, but they said we can't do both in this early application. I opted for irrigation, and I think twenty years later that it probably was a mistake. I think now they are saying that they

were better off saving more topsoil and rely on what little rainfall, what did fall, to revegetate the land. But the decision had to be made and we went for, we would irrigate something like 600 years to catch up. And we also said we would go back and replant what was disturbed prior to mining.

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There were some big commitments made and a lot of people were uncomfortable in this whole time; the environmental people were just screaming and yelling trying to stop the mine more than trying to figure out anything that would work and protect the environment. To give you an example of how difficult it was for guidance, we found two people, consultants, that were available, that had experience in mine land reclamations. One person was out of British Columbia, who specialized in mine tailings where they had, I don't know, maybe eighty inches of rain a year on basically sand, and the other fellow was working out of Peabody Coal out of the Kentucky area where they did have topsoil and maybe thirty, forty inches of rain and their experiences really weren't very applicable. We had eight or seven inches of rain and very saline soil. It was very difficult to know what to do and looking back on it there wasn't really a real reluctance by top management to comply with these new regulations. The reluctance was to comply with anything that was very costly, that didn't have at least some hope of addressing the real issue and that was providing the land or returning the land to the Navajo tribe in better condition than we had received it. There was reluctance at the operational level of changing a lot of operational practices, implementing new equipment to do this new reclamation and, of course, being reimbursed for it.

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Swent: What different thing would they have to do in mining?

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Schipke: Well, the biggest thing that we had to do was, first of all, get scientific about everything. We had to determine where we had topsoil, what types of soil were there, and then we had to take special precautions. In many places we would save the topsoil. Then we had to move different types of equipment. We did not have scrapers. Most of us picked up topsoil with scrapers, so we had to go out and buy scrapers. It had to be stockpiled, and it had to be placed outside of areas to be disturbed in the act of mining, to be picked up and replaced again. We had to design the mines so that there would be drainage through the mines. We couldn't allow the pit to fill up with the infrequent storms that happened, so we had to have a long-term plan for drainage. Then the slopes had to be knocked down, and they had to have some engineering controls provided to make sure they weren't too steep. The covering of ash that had to be placed at a certain depth in the mine, and you had to now go out and convince a regulatory agency that you had the sufficient coverage on it.

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So really there was a big impact, really to the operation as to how they were operating in the past. It required a lot more integration in the planning and the execution in addition to just equipment. So there was resistance. Really what was fundamentally wrong--we were spending, you know, if you took an average--I think the average of the mine was eighty acres would support a sheep. Sheep was worth maybe sixty, seventy, eighty dollars. For eighty acres we were spending, when I left, maybe $5,000 an acre. We were spending over $400,000 to reclaim the land that would support one sheep a year for

eighty dollars. There was a lot of people that would go through the economics and said, "You'd be better off to give the $400,000 to the tribe, let them invest it, and earn interest on it." You had that kind of thinking that also was disruptive to going out and reclaiming the lands.

00:20:06

Swent: Where did the people of the Navajo Nation, where did they stand on this? Were they--

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Schipke: The Navajo Nation, in all honesty, they were pretty much on the sidelines. They really were. The old-timers that were around when the agreement was signed, they knew the basis on which it was signed. The younger people coming to power on the Navajo Nation, they, of course, wanted the reclamation. At that time we also had the American Indian Movement, AIM, and we did have some confrontation. In New Mexico they took over the Fairchild plant in Shiprock, and we had bullets shot through our drills and one dragline while I was there. So there was also, at this same time, younger Navajos wanted the mining stopped more than anything else. Where they stood on the environmental? I think it would be fair to say that they just stood on the side, and it really was fought with the federal government and with the mining companies over what should be done, over what time period, what was reasonable with the knowledge that was known as a requirement. That was really where the issues were for twenty years. It was really the government speaking for all this activity. You had very distrustful environmental groups that didn't believe that the companies would do anything, and all this was on the backdrop that people didn't know what you had to do technically to reclaim the land.

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It was stressful because the decisions that were made, whether it was by the people within the mining company, or whether it was by the state regulatory commissions, some of their interpretations have turned out to be just flat, technically wrong. What they required us to do apparently made the situation worse instead of better.

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Swent: Can you give an example?

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Schipke: Yeah, one of the examples that they required is that we would terrace the outslopes of the waste dumps from the mine. Normally they would stick up above the surrounding land. So they wanted us to put terraces in it to hold the water back so we wouldn't have large erosion. That was a requirement you had to put terraces on it. Over time they found out that those terraces really, instead of helping, they collected the water and then allowed the water to break through then and make very massive channels of erosion. Today what is required is that you--gentle slope, you do stabilize it maybe with a mulch, quickly establish revegetation because the terraces really didn't work. They actually seemed to make the situation worse. That's an example and there were others that were required that really at the end of the day, technically, didn't work.

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Eventually relief was granted and something else was implemented instead, but it took a long time and of course the burden of proof was always left on the mining companies to show that it would work. This, of course, took time, money.

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Swent: Huge expense.

00:23:57
Schipke: Huge expense. And, in the meantime, a lot of the times the reclamation programs would suffer. The environmental history during those times was quite interesting. The environmental groups were different than they are today; the environmental groups were more media-oriented. They just wanted to see themselves on TV. They just tried to emotionally stir up the people. The technical aspects, they would never engage in technical discussions on these points that they advocated because literally there was a lot of times no basis, and they had no information to substantiate claims they were making. So it was more just a lot of headline-grabbing rhetoric and protests was their main strategies. It was not constructive at the end of the day. It was very difficult to engage them in discussion that was allowing you to come up with constructive solutions to these ongoing problems. Eventually, towards the end, the last ten years, it's been a different group of environmental people really that have been the most influential and they have been the people that have worked with industry and the government in slowly changing regulations or requirements to reflect what's needed.

00:25:24
Swent: You say the last ten years; that would be the nineties?

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Schipke: That basically would be the nineties, but the seventies and eighties were--

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Swent: That's a thirty-year span that you're looking at, so then--

00:25:31
Schipke: Yeah, the first twenty years definitely was a difficult period. There were a lot of ongoing practices that had to change, there's no question about that. There were companies that discontinued operations and there were new mines that never started up because of environmental issues. Some people still think that we've gone overboard during this period and the legacy is still with us. Now, most of your mines are overseas. The big cost has been the environmental cost.

00:26:15
Swent: How did this compare with Australia, for instance?

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Schipke: Australia took a different--same problem, when I visited Australia they'd have twenty, thirty years of nothing that had been done in reclamation. The history is quite the same, although maybe not as old in some districts. They took a different approach, and generally speaking they would take the approach of saying, "Well, at the end of the day we want the land reclaimed to the condition equal to or better than when you started." Then they'd leave it up to the mining company to come forward with how they were going to do that. Once the mining companies came forward and specified how they were going to do that, then they just monitored their activities to see to it that they were carrying them out. So they were basically much, much more difficult and they didn't dictate or prescribe how it was to be done. Therefore there was much more incentive for

the mining companies to come up with cost-saving techniques to incorporate the plan, and I think that at the end of the day it was a lot more effective system.

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Swent: Let's look at the other places then: Chile, Indonesia. Chile first, maybe.

00:27:48

Schipke: Chile, although it wasn't coal operations, in Chile that was a new mine, the Escondida mine that I worked on, and of course getting the permit were part of that requirement.

00:28:01

Swent: This was copper?

00:28:04

Schipke: There were requirements to comply, again they were very--they were onerous, but they also at the same time weren't real detailed like you had in the U.S. They had strict requirements. There their biggest problem was that they weren't enforcing the requirements, so a lot of companies weren't just doing anything. They really didn't have a very strong enforcement division at that time. They were pretty pragmatic, they knew that at Escondida that the water that we were using for the mining operation would be depleting the aquifers. They knew that we weren't just mining the copper, we were also mining the water and that resource would depleted and there would be effects from it. They were pragmatic enough to know there was a long-term environmental impact and they accepted that.

00:29:04

Here in the U.S. I'm not sure that they'd accept depleting a water resource to provide a mining operation. But there that was accepted, because there was really no industries out in the desert so they felt fairly comfortable with it.

00:30:04

Indonesia patterned themselves pretty much after the U.S. regulation. There's no question about that. They were quite detailed, quite prescriptive. They had a strong, on paper, enforcement policy. They were organized with a fairly large environmental staff to inspect and monitor the mining operation. They were basically patterned after the U.S. probably twenty years later, so there was a little more realism in some of their requirements. Well, a lot of people over there take the attitude that you don't have to comply with regulations and the inspectors can be bribed. There was a lot of, especially by the Asian mining companies like the Korean and some of the Chinese operations, that were Chinese families, completely ignored the regulations and concentrated on doing the least cost in mining, and they had trouble with the inspectors. I assume they basically bribed them or bribed people at higher levels. So, enforcement was a real issue to the point that many people completely ignored the regulations. American companies, in general, they did comply with the regulations and the long-term effects of their mines. So, the regulations were there, but there was a serious enforcement problem.

00:31:10

Swent: You said earlier, and of course this is a common assumption, that mining has gone overseas because of environmental restrictions here, but if the regulations are virtually the same in all those countries, it would equalize, wouldn't it?

00:31:37

Schipke: I think it will equalize. I think it will, other than you're still going to have an Indonesia where the labor rates and things like this would offset that. They should equalize as long as people enforce the regulations, a lot of it is just token, but if they do see that there's enough of a groundswell to see to it that they are enforced, it would equalize, it would equalize. I don't believe that the environmental movement has driven mining operations overseas. What's driven it overseas, also, is the quality of the ore bodies that can be discovered overseas and the cost of labor is, those two, and the biggest one would probably be the quality of ore bodies that can be found overseas.

00:32:25

Swent: [chuckles]

00:32:26

Schipke: That's probably what you meant, but the environmental movement, no question about it, has had a big impact. Probably the bigger impact on new development was the fact that over in Indonesia it took maybe a year to get the necessary approvals to start a mine. Here, my guess would be closer to five years. That's pretty significant on developing new projects. There are a lot of factors, but I don't believe the environmental movement forced them because of costs overseas, but it definitely has had an impact on the development of new projects versus the development overseas. Here, if you start down that path, in five years you're not even sure you're going to make it because there's always going to be some impact, short-term or long-term, that's not going to be readily accepted to the community, whether it's a local community or a larger community. It's going to be some impact from mining operations whether it's long-term or just of an interim nature.

00:33:40

Swent: You can't help that.

00:33:42

Schipke: You can't help that, there is a disturbance there. So that's pretty much the history of the reclamation. I think now that you'll find the New Mexico operation. We stayed very influential and we did spend a lot of time, a lot of it was educating people; it came down to a pure education. We had to drag regulators out--not just have them look at the regulation books--but we had to drag them out in the field and show them what we're doing, what was working, what wasn't. We had to bring environmental groups out. Those that we could get to come out to look and see what was actually being done, what was working and what was not working. To me, twenty years was spent in just educating a lot of the parties involved so they could get this down to what was the facts and not just a lot of rhetoric. We didn't do that in the beginning. We skipped off, pretty arm's length, but when we started doing this, you started seeing a lot of mediation and middle ground being found, et cetera, but it was a long, slow process.

00:34:52

Swent: [chuckles] Yes, indeed. Do you think Utah was particularly--well, where did they stand compared with other companies, for instance?

00:35:06

Schipke: Well, speaking of New Mexico, we were about the same. We also had the Kayenta mines, which were Peabody's. Peabody had a little newer lease. They had done some

areas; they had probably reclaimed a little more land than Utah had. Some of their water problems were really in pretty poor shape while Utah at least addressed a few of those. I'd have to say on average Utah was average. They weren't a leader, but they weren't at the back of the pack, either. They were pretty much average. We took a pretty active role and, primarily because of the creation of Leroy Balzer's department at the corporate level, we took a very active role in new regulations in New Mexico. I would say that we did lead as we tried to influence the promulgation of these new regulations that would apply to us. We were very, very active there in trying to get it on a technical debate level instead of just a lot of rhetoric. I'd say we definitely had a lot of leaders on the legislative front.

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I think we were probably laggers in actual execution in the field. We kept not believing some of these requirements were necessary, and we felt that there would be some relief. That never happened. So there were some areas that we just, we lagged. We said, "Ah, we're not going to spend the money and do that now." This drug on for years and finally we came to the realization that this had to be done, and we did it. Really I think in the execution, I think, it was probably a little bit of lagger because we felt that it wasn't reasonable, and that there would be some relief granted to the regulatory process if that ever happened. [chuckles]

00:37:10

Swent: [laughs] What's the state there now? What's the condition?

00:37:16

Schipke: I haven't visited in the last five years. Last time I had visited, and of course when I ran the Navajo Mine from the return in Australia, there was no question that the environmental issues were being pushed at the mining operation. Everybody, right down to the average worker said, "What can we do? What should we do," et cetera. That was completely done at the work force and at the mine level. It was very supportive of the regulations; they might grumble a little bit, but there was no question that they were going to do it. And at some times some of the things that were done were kind of overkill, but there was a strong emphasis placed, and it had been accepted and pushed right down to the workers. That was really good, because a lot of those things, a little prevention goes a long ways. They were working their way through their backlog and they continued to honor their commitment to reclaim the lands prior to the act. They just took time, but all the parties involved realized it was a long-term effort. They were getting there and they had won some awards for their environmental activities. Some of the staff received individual awards for outstanding efforts in this area. They basically backed up their being leaders in the mines.

00:38:56

Swent: What about the relationships with the Native Americans?

00:39:02

Schipke: Well, let's switch gears on that one, we'll go back. We'll go back to Native Americans. When the mine started, Navajo Mine, that was started really as a three-way agreement between the tribe, the power plant, and the mine. At that time, people said the quality of the coal was too poor and the power plant was in the wrong location. The power was really needed on the coast or at Arizona, which was probably three or four hundred miles away anyway.

00:39:49
Swent: Just a second, it's a good place to stop anyway.

[Minidisc 6]

00:00:00
Swent: We're continuing the interview with Paul Schipke on September 12, 2003. We've been talking about the environmental movement in the mining as you saw it, particularly in the coal mining for thirty years. I had just asked about the relations with the Native American people. We'll be particularly--well, not only the Navajos, there were other people involved, weren't there?

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Schipke: Later on it was the Ute Mountain Utes.

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Swent: I think this is a topic of some interest and one that we really haven't talked about at all.

00:00:38
Schipke: I talked generally related as I best understood it; I wasn't around when the early leases were formed, but in talking to them, the three main players were the power plant, the Navajo tribe and the mining company. Really the project was kind of state-of-the-art at that time. Not so much from the mining standpoint, all that was proven technology, but burning the very high ash, corrosive coal, and transmitting power over very long distances was much pretty state-of-the-art with a lot more uncertainties to it. At that time, I think all of these agreements were put together with handshakes, personal knowledge and understanding of one another, and trust.

00:01:35
Swent: "At that time;" you're talking about the late seventies?

00:01:43
Schipke: I'll be talking about the sixties. We'd be talking about the late fifties, early sixties when really the Navajo Mine leases and the power plant, the decisions were made to proceed with those projects and the leases were negotiated for a plant site and for coal lease area. Very much a cooperative approach to everything at that time. When I arrived on the scene, which would have been fifteen to twenty years afterwards, the relationship was really starting to deteriorate probably with the Navajo tribe. It was more because of internal forces within the Navajo tribe than anything else.

00:02:32
Swent: Who was the chairman then, do you remember? There was someone named--

00:02:36
Schipke: Chairman McDonald.

00:02:38
Swent: McDonald?

00:02:39
Schipke: Yes. And he negotiated the leases, if I remember correctly. [During his review, Schipke added that this statement may be incorrect.] He was able to shake their hand and say,

"We will get a lease for you." By the time I got there the younger generation was growing up, and they were much more militant. Really they were trying to rehash what had happened to them in the late 1800s. They were very anti-business on the reservation, and they were pushing more tribal values although really they weren't. It was more to me trying to follow the lead of the Sierra Club in getting public attention drawn to what had happened really from the treaty time to the modern time, very distrustful of everybody, and pushing the leaders of the Navajo tribe to try to cancel the leases. There was a lot of conflict between the older and the ruling people within the tribe and the younger people that were coming up that were quite militant. As a result of this really, they were ineffective as a group; they could no longer really make decisions one way or the other. I don't know if it's vastly improved since then. They're very ineffective as a tribe, as the Navajo Nation, in dealing with anything to be located or done differently on the reservation.

00:04:30

We had a very large investment that would have been three times the size of what existed there now for coal gasification and piping the gas to the West Coast. That was approved by everybody but required a tribal signoff on it all, and that couldn't be secured because of all this suddenly a very different opinion, and it was primarily an age difference in views. It fell apart, and really during my whole time there with the Navajo Nation, it was very difficult to do anything new, amend the leases, suggest new projects. They just were ineffective. The relationship remained--I think considering all this turmoil--the relationship remained good primarily because our Navajo employees were very staunch supporters of the value of the mining operation. Also, they were able to physically see some of the issues that they were critical of us, the environmental issues, for example. These were being addressed. Employment: our employment was in the high eighties, mid-eighties percent of our employees were Navajo. Not just Native American, but Navajos themselves. The employment, the environmental issues that were being addressed, these things all kept a relationship good on a day-to-day basis.

00:06:16

Swent: We didn't mention, and maybe this is getting off the track a little bit, but I haven't mentioned health concerns. Were there any--

00:06:29

Schipke: On the environmental side?

00:06:31

Swent: Well, health of the workers; what were the hazards, if any?

00:06:38

Schipke: Yes, there were health concerns; primarily they were associated with dust exposure, of workers to dust. Some of our dust did contain silica, so there were some possibilities of so-called "black lung" occurring at our operations, but there had never been a recorded case of black lung at any surface mine in the U.S. despite all the rhetoric.

00:07:06

Swent: That is, we should say, these were all surface mines then?

00:07:07

Schipke: These were all surface mines.

00:07:09

Swent: So ventilation was not much of a problem?

00:07:12

Schipke: And we were paying, I think it was fifty cents a ton at it, I think it was, in the coffers of the federal government cases back in the East. But we never had cases there, but we did have dust exposures, and there was no question that the dust was an issue. This was one that we had felt more comfortable tackling as management because it was more of a technical issue. Operational changes had to be made, but here is one where the equipment manufacturers came to our help, people like Caterpillar. The equipment manufacturers designed their mobile equipment to have better quality cabs that was filtered and air-conditioned and heated so you were completely isolated from the dusty environment. Tools were developed to better maintain that equipment, and the awareness spread to the work force. So that was probably the single largest exposure we probably had, was to the dust.

00:08:21

Swent: What about smoking?

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Schipke: Smoking? I guess I never considered that an industry issue, that was more of a personal issue with individuals.

00:08:33

Swent: Did they restrict smoking on the job?

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Schipke: Well, the only restriction they had was from a safety standpoint and our blasting activities for people that were around explosives. Also in our coal-handling facilities where a spark or open flame could possibly start off an explosion from dust particles in the air. There would be restrictions in smoking, but other than that it was pretty much it. Towards the end we had a lot more of the in-house campaigns to restrict smoking in enclosed environments, et cetera, but it was all on a voluntary basis. I suspect that if I visited now it would be mandatory that there would be no smoking in enclosed cabs, but at that time, what we basically did to protect ourselves from future claims was all employees went through chest x-rays and extensive physicals so we could document their pre-existing conditions.

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So really we had health issues, but compared to many industries and other mines, it was not, to me, a major concern that existed. Something that was addressed was not a major concern by either the employees, the unions, or ourselves. We were all concerned about safety. It had a lot bigger front stage than that. That was more of an issue and I think it was properly addressed because it moved along about as fast as you could make some of the changes. When you talk about retrofitting cabs to this large equipment, et cetera, it took time. It went some time between two or three generations of equipment before you had something that was robust enough to last in the mining environment.

00:10:22

Swent: I got you sort of sidetracked from the relations with the Indians, or the Native Americans.

00:10:40

Schipke: Well, maybe we should go back and talk more on a personal level. That was kind of a general relationship between the company and the Navajo tribe in my perspective in a way. On a personal level, I enjoyed my time working with the Navajo, and later on I had an opportunity to work with the Ute Mountain Ute people over at the San Juan mines. No question about it that people have a misconception here in the U.S. that an Indian is an Indian, and that's not true. There was significant differences in the cultures of the Navajo and the Utes Mountain Utes. A lot of their hereditary enemies, and some of those feelings, still existed. It was somewhat tense when the Utes and the Navajos had to work together. When I was a mine manager in the eighties at San Juan, we had to train the Ute Mountain Ute employees to operate the mining equipment. The equipment that was being used was similar to what was being used at the San Juan Mine. So these people were brought down to the San Juan Mine to be trained. All, or most all, of the trainers were Navajos and most all of their fellow workers were Navajos. So they were pretty much surrounded by one of their hereditary foes. There was tension, no question about it, nothing really violent, but I think there's always subtle pressure on that. It was very unfortunate, because I think, don't quote me on it, twenty-eight employees were brought down from the Ute Mountain Ute Reservation to work. At the end of the year there was three left. The rest had all quit. Some of it, I think, was this undercurrent of tension with the Navajos, some of it was the distance they had to drive--some of them had to drive like forty-five, fifty miles a day to come to work. Some of it also was their reservation system. We lost a lot of them.

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There was a big difference with what happened to some of the various Native Americans from the reservation period from when they signed the treaties up until modern day. The Navajo tribe really was smart, and they maintained ownership of all the land, and they maintained control of all of the funds that were handed out by the government. So they basically required the people of the Navajo tribe to work; they had to work and earn a living. There really were very small handouts that were granted, then, by the government. Our people, the Navajos, were hard workers. It was not an issue of them working hard. They could handle some of the harsh conditions that they were required to work in.

00:14:33

The Ute Mountain Utes, they basically were given a handout every month, a stipend every month. They got it from the government and they turned around and they handed it all out to every member of the tribe. It was enough for them to live, I wouldn't say comfortably, but they could live up to satisfaction. So many of them never really had to hold down a job or work hard because of it. They weren't willing to work as hard as the Navajos, and work in a routine, standard eight-hour day, five days a week was very, very foreign to them. It was foreign to the Navajos, but they were more accustomed to the working, so they quickly adapted to our way of working a forty-hour week. I think it really was much more difficult for the Ute Mountain Utes to do this. If they didn't work out at the mines, they could always go back to their old ways and they could get by. So it was pretty disappointing, there was a lot of heartaches. We were quite positive from our experience from the Navajos that we would be able to retain and train a lot of the workforce with the Ute Mountain Utes. It didn't happen that way, it didn't happen that way. [knocking]

00:15:36

Swent: This was at the San Juan?

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Schipke: San Juan Mine, but we were training people to work at the La Plata Mine. The third mine in that area that had been operated by Utah.

00:15:50

Swent: And that was [knocking]--could you wait a little while, please? [tape interruption] Were all these mines in New Mexico?

00:16:08

Schipke: They were all in New Mexico. They were all about twenty miles apart. The coal for the San Juan Mine was mined, was hauled across, we just literally hauled it across the Ute Mountain Ute Reservation. We had to haul it across the corner of their reservation. It wasn't mined on their coal, on their land; we just had a haul road through it. They negotiated for us to have the right to haul through their lands; they negotiated preferential hiring from people from their tribe.

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Swent: That's not good.

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Schipke: They used that one bargaining chip to get preferential hiring at the La Plata Mine, which turned out to be very awkward for us because we had practiced preferential hiring of Navajos through our whole history down there. We had a lot of Navajos that wanted to work up there. It was where the promotional opportunities were for the Navajo people. We had a little bit of conflict, and we had a bargaining unit that didn't cover the La Plata Mine, but, at that time, and it was a real issue that had to be resolved with the union, and we eventually worked it all out where we would practice the preferential hiring, and then after we finally got all that sorted out, and we hired them, starting training them, 10 percent stuck with us. When I left, last time I visited down there, it hadn't really improved a lot. The only difference was that the leaders of the Ute Mountain Ute people, they realized they had that opportunity but it wasn't going to be utilized by their people. They weren't pushing the issue, and we were very sensitive to it. Whenever there was an opportunity we would always try to employ somebody from there.

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It was very difficult. I enjoyed the Ute Mountain Ute people, and if there's one thing that I did learn from them that I use to this day, is that they didn't like to address issues head-on. They would come in and tell me a story. They would come in and tell me about a little legend, and in telling that story it related to some issue at the mine. It wouldn't tell you the characters involved, or what was happening, but the legend, the story, whatever they told me, indirectly there was a message there that they wanted me to be aware of. I've found that's been very effective later in life, in dealing with other people. You can tell a story and get a message across without putting your fingers on every point. I remember that was something I learned from them and always respected them for it.

00:19:05

The Navajos, they were a great people. I think looking back on it, my time with the Navajo people, they were very artistic people. They were some of the best equipment operators I have ever worked with. They also were some of the best welders that I've ever worked with. They were extremely artistic and were very, very good with their hands. I'd take them any place in the world.

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Swent: How would being artistic affect your operation of the equipment?

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Schipke: You had to have a nice touch of the controls. If the dragline was sitting there with a bucket three hundred feet from you, you had to pick up the dirt and then you had to swing it around and place it very precisely, with a lot of precision, and you had to be able to do this for eight hours, too. They were very good at it. They could execute things with these large machines that I don't think the boys in Australia--I don't think they could do. So that's what I mean by being artistic, and people don't look at moving dirt as being artistic, but there is some activities of it where you need to be very, very precise in how you do it or at least some disasters and problems will be the outcome of it. I look at some operators are very, very good, and it takes a real touch, you got to have a real touch for it. A lot of the Navajos had that. And welding, and the same thing with welding; they were very good at that.

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More difficult things were where you had to visualize: engineers. Engineering skills were difficult, electrical skills were more difficult for them, to visualize electricity. Mechanics, they were pretty quick to learn their mechanical trades, but electrical skills were difficult, engineering skills were difficult. Then of course you had the cultural problems. It was very frustrating on the management side. We had a very low percentage of Navajos in management and in engineering. Even the people--and there were Navajos that we were able to recruit that had gone away and received engineering degrees and some of them came back and they were excellent engineers, but over time they no longer had the ambition and drive to continually improve themselves. They slowly seemed to gravitate to where they were very comfortable with their lives, what they were doing and what they were doing with their lives off the job. They had no desire to move up in management and take up some of the more difficult engineering projects. They didn't want to do it. It was very hard to promote people upward when they had a very reluctance to take on that additional responsibility, and that was a very hard thing for people to accept from the Navajo tribe. "Why weren't we pushing these people up?" You've got an engineer that had been here for ten years and why isn't he up managing the engineering department or a more responsible position? They just had a hard time accepting that he wasn't qualified because he refused to take on more responsibility and learn with that. It created a little bit of difficulty there.

00:22:57

Swent: What about absenteeism?

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Schipke: Absenteeism was a real problem, a very serious problem, and was generally brought around more by cultural demands at home being placed on them ahead of their jobs. Some of it we addressed, for example, certain ceremonies, Native American

ceremonies, we would recognize and excuse for so it wouldn't be an issue. So some things like the ceremonies where we knew there was a difference, that was quite a demand placed on an employee. We just had a policy that allowed that to be an excused absence. Eventually we had to get to a point where we had to say, and got agreed by the union, that if you missed three days of unexcused absences, you would be terminated. That basically took care of our problems. They knew exactly what the rule was; there was no give in it, and they changed their behaviors a lot. Some of them couldn't, and eventually would end up losing their employment with the mines. It was a problem, but towards the end people that came to work there fully understood that requirement. It had been so widely accepted that absenteeism was usually not an issue. Usually if absenteeism started showing up, usually they had developed a drinking problem. We did have--it was a very effective program--we had an employee assistance program where they could have access to counseling and additional help, medical help or psychiatric help or whatever off the reservation. Marriage counseling, money management counseling. Usually, when an employee missed once or twice, unexcused absence, he was referred to this program and a lot of people helped him. It definitely was needed, and I think it was a very positive program and helped. In the beginning, when I first worked there, absenteeism--there they just depended on the foreman: he'd excuse you, and some foremen were very lenient; others were trying to be very tough about it and it didn't work. We got it to be more systemized with the usual assistance and it really did help for everybody then.

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Swent: What was the union?

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Schipke: The Operating Engineers [International Union of Operating Engineers] and they were, to me, very moderate, and they were very supportive of their employees. At times they could be very tough, but they weren't militant, which I would have considered the United Mine Workers, and we did have a big push to be raided by the United Mine Workers, but they were voted down by our employees, and they left us alone. We paid slightly higher than the union scale, and the Operating Engineers did take care of the employees and maintained--really there they did a good job of supporting the Navajos. It was adversarial at times, but in general, looking back on it and thinking about my times elsewhere in the world, it was really a good relationship with the union, and it was a constructive type of relationship that existed between the employees, the union, and the company.

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Swent: That union, is that part of the AFL?

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Schipke: Yes. The Operating Engineers? They represent quite a few of the mines out in the Wyoming area. Almost all of them, there's a few hardrock mines, but most of them are coal operations. Operating Engineers is probably one of the unions people preferred over the United Mine Workers. They're also heavy in the construction trades. They helped us. We had a very good apprenticeship program in the electrical and mechanical fields, and they were extremely supportive, and sometimes they were harder on our employees than the company was in developing their skills. The apprenticeship

program was an excellent one that was put together with the union and functioned very well with Native Americans.

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There were cultural differences and people, a lot of new employees in the staff area just didn't understand the Navajo culture and some of their ways of handling problems and some of their pressures from off the job that didn't affect them. They didn't understand that or have any empathy with it, and there was always a little bit of issues with new employees coming on, but the Navajos were quite tolerant people, and they were willing to work with--even work with the supervisor to show him his ways at times. It was good.

00:28:53

Swent: Had to be some education on both sides.

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Schipke: It was. I have to say that it was probably the best place I've worked with respect for preparing me to go overseas, because you could respect people even though they had a different belief or different view, held different values and focused on just what they do on the job. Mainly it was a training ground, a good training ground. The cultural differences, people had to be sensitive to them, you had to make changes in how you worked to be able to advance some of these programs. Also, you had to be very active in the community, community support was important to them also.

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Swent: What did you do in that area?

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Schipke: One of their requirements that they negotiated early on was provide them free coal. So they had activities, they had access, so we set up stockpiles of coal where they could come in on certain days and pick up all the coal they wanted for home heating. We did a lot for surrounding chapter houses and some parts of their tribe we would help them with some of their building, road maintenance. We built stock dams, a lot of things like that we could do with our equipment, we did. There was also contributions to some of the chapter houses and some of their ceremonies, et cetera. On the cultural front we really tried not to impose ourselves on it. We basically stayed out of their cultural activities, other than maybe financial support, we allowed to them to do, to go as far as they wanted to in those areas. It worked well. We tried to primarily have our own Navajo employees work with the tribal members. They were more comfortable, everyone was more comfortable, and the solutions they came up with were more readily acceptable to everybody too. It worked well.

00:31:21

Swent: Where did you live at that time?

00:31:24

Schipke: I lived in the town of Farmington, New Mexico, which was twenty miles off the reservation, a town of about 30,000. The interesting thing was that a lot of the Navajos slowly left the reservation and were moving into the surrounding areas just off the reservation, towards the end there. You also saw a shift where they were using more of the "white man" facilities that they could afford then, and less of the public services that

were being provided by the tribe. You saw that shift when I was there, Navajos who didn't feel that the services being provided by the Navajo Nation were good enough. There were some cultural beliefs that did impact on our operations, some of them were interesting stories. When I was at San Juan we had an old hogan that was going to be mined through, and it was a Navajo hogan, but if somebody were to die in a hogan it was abandoned because it contained spirits. They may not always be benevolent spirits. It basically ought not to be disturbed, because of the spirits of the person that had died there. This hogan was in the way of our mining operations, and our supervisor just couldn't understand, and he was white and had been around a long time but he just hadn't stumbled on why we couldn't destroy that hogan. The dragline had moved right up to it, but it just wasn't moving. It was on paper we were moving a lot of dirt, but really we weren't. Of all those Navajo, they weren't going to be the one to destroy that hogan and release these spirits. And they leave it for the next guy, and his shift, and he'd come and dig around and the buckets would just have a little bit of dirt. As soon as the foreman come around, he'd fill the buckets up, and as soon as they were gone, he'd empty buckets going on back and forth. This went on back and forth for a couple of shifts, and we just couldn't get moving, you know. Finally one of the Navajos told us what one of the problems was. We put an Anglo operator on the dragline and destroyed that hogan and mined through that little area. Then the Navajos went back to work. When they went back to work on that dragline it set production records getting away from that spot. [chuckles]

00:34:20

Swent: Oh!

00:34:21

Schipke: But you know these things would happen and a lot of things were just strong beliefs that you would respect. When I was a mine manager at San Juan, it came to my attention that the Navajos felt that the mine needed a purification ceremony; so many bad things, there was a lot of accidents; we had a high number of accidents at the time. Owls were spotted in the preparation plant, a lot of coyotes were around, all of these were strong messages that it was not a healthy place. They approached me, and we had a very quiet purification ceremony that took more than three ceremonies to do it. I remember that my immediate boss had an absolute fit over that. He was quite a religious person and felt very strongly that we shouldn't allow these heathen acts on the mine property. That was kind of difficult for me, but that was very important to my work force and to the Navajos in the area to have these ceremonies. They felt much better afterwards.

00:35:40

Swent: Of course.

00:35:41

Schipke: So these things, these things people had to approach and some of the managers weren't sensitive to it, and some were. It was sensitivity that you had to develop in order to be successful with the Native Americans. That pretty much concludes the--unless you've got some more questions?

00:36:03

Swent: No, I think that was wonderful. I just wanted to ask: they didn't resent having the Anglo driver take the hogan down?

00:36:14
Schipke: They were just relieved that we finally understood what the issue was.

00:36:17
Swent: They accepted that?

00:36:18
Schipke: They accepted that very much so. They'd known--see, we'd talked to them about it. We had archaeologists out there excavated the historical value of it. That wasn't it. Some of their younger Navajo operators even though they didn't seem traditional--as we said there was traditional and nontraditional--it was nontraditional, they still wouldn't do it. It still was quite deep with him. But there was no resentment of an Anglo operator destroying that hogan.

00:36:50
Swent: Good, that sounds like a very creative way to work it out. [chuckles]

00:36:53
Schipke: Well, you had to find these things at times, you had to find a bit around and a way to solve these problems, you know. I enjoyed my time working with the Native Americans there. There were times of frustration and times of personal disappointments when you had certain employees that you felt very strongly, and they reached a point where they just didn't want to progress any more in the management system.

00:37:18
Swent: Different culture.

00:37:24
Schipke: Yeah, different culture. So it was good, though.

00:37:27
Swent: Well, I think that's a good place to stop, Paul. Thank you very much. That was very good.

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